X-COM
STRATEGIES AND SECRETS

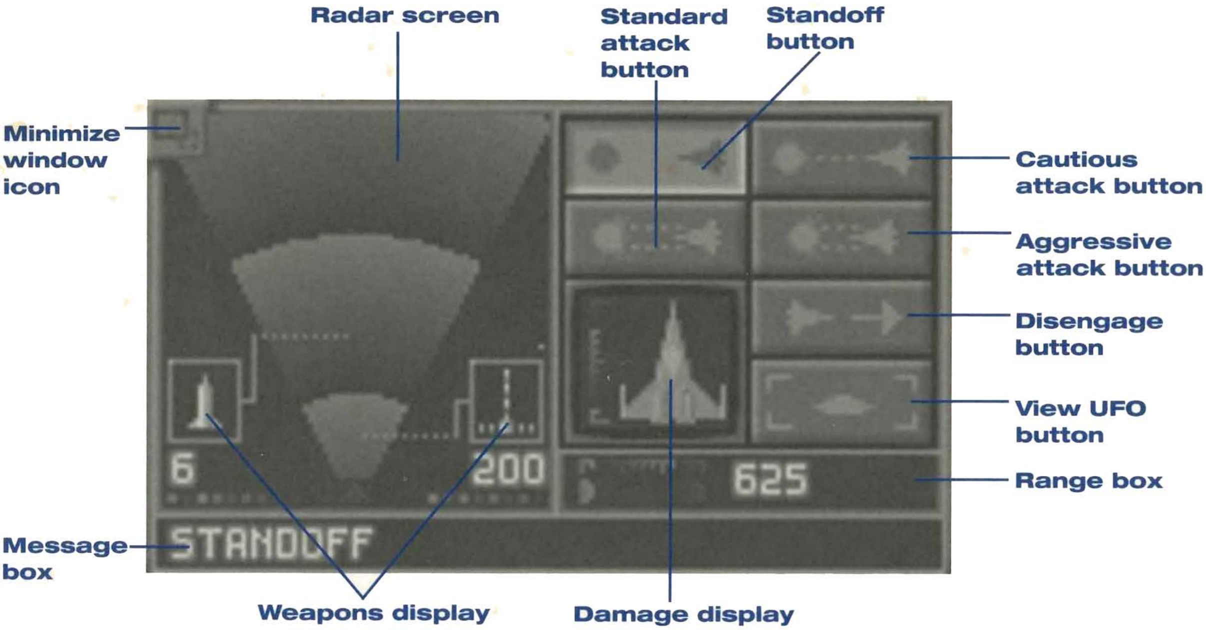
NEIL RANDALL

IMPROVE YOUR WIN RATIO WITH SUPERIOR STRATEGIES AND TEMPTING TACTICS

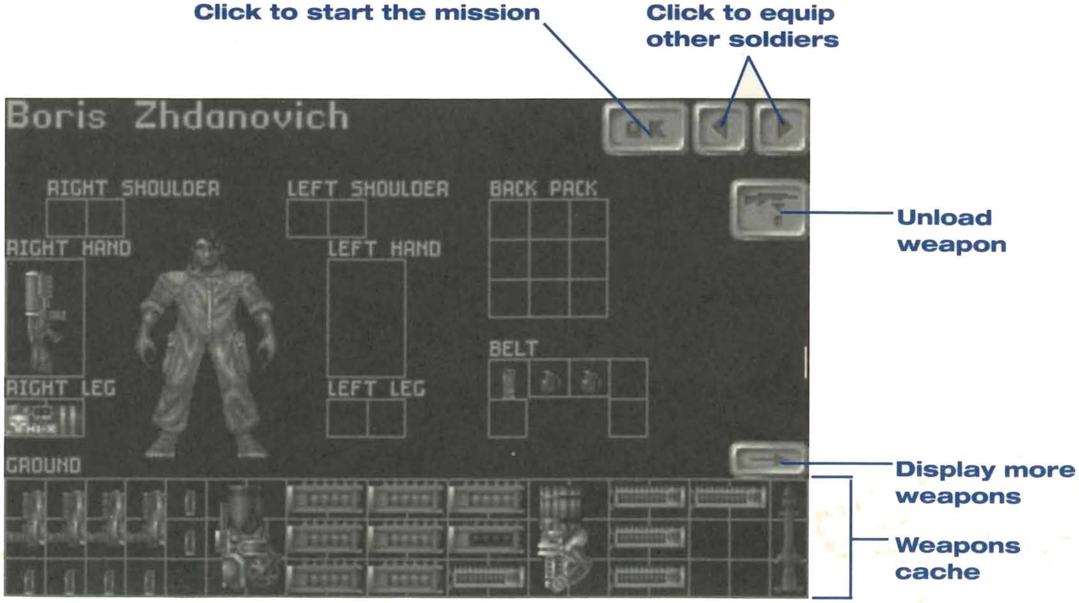
DISCOVER SKILL-ADVANCING INSIGHTS FROM X-COM GAMERS WORLDWIDE

SYBEX

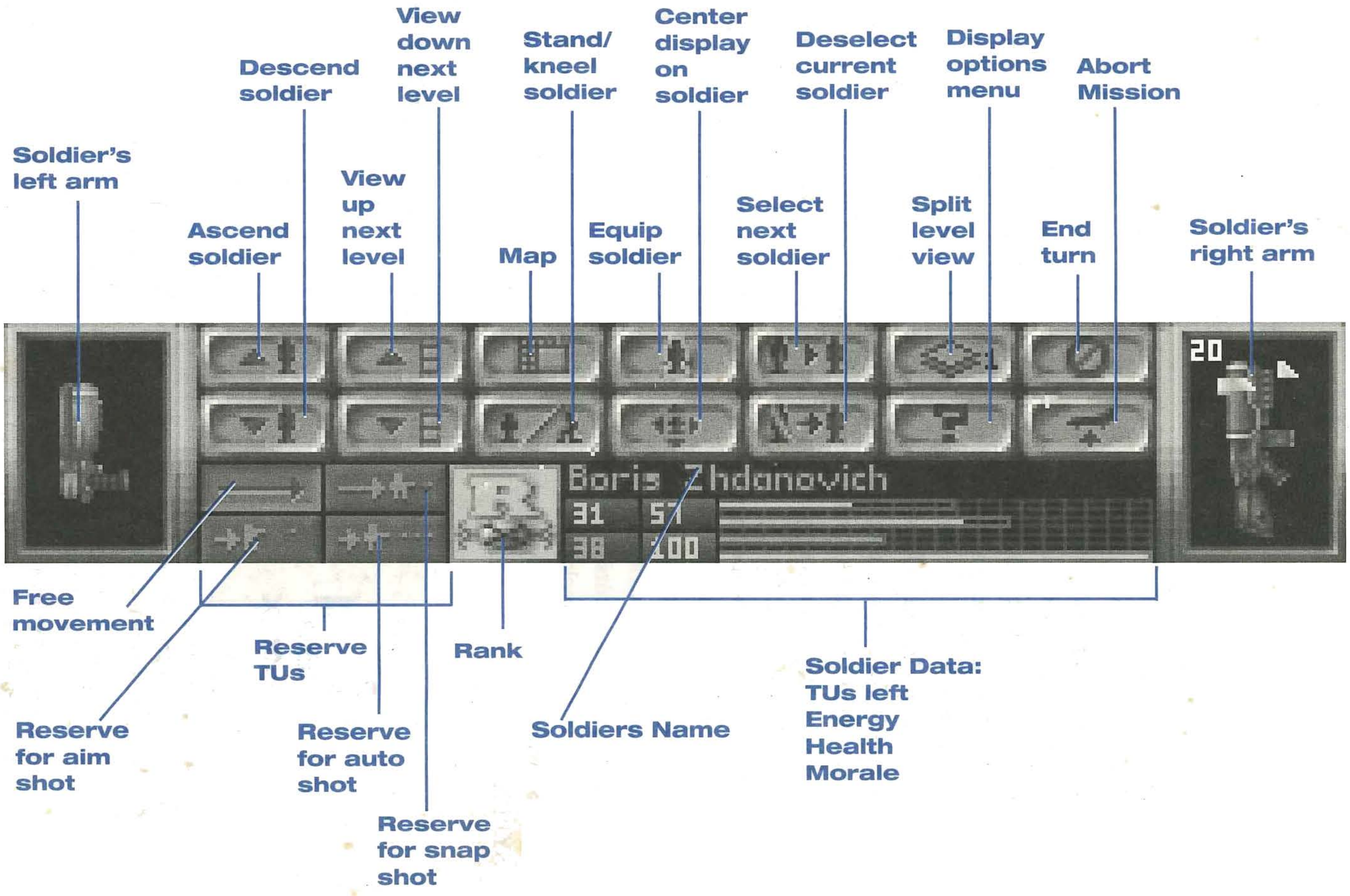
Air-to-Air Combat Window


Radar screen
Standard attack button
Standoff button
Minimize window icon
Cautious attack button
Aggressive attack button
Disengage button
View UFO button
Range box
Message box
Weapons display
Damage display
6
200
625
STANDOFF

Equip Squad Screen


Click to start the mission
Click to equip other soldiers
Unload weapon
Display more weapons
Weapons cache
Boris Zhdanovich
OK
RIGHT SHOULDER
LEFT SHOULDER
BACK PACK
RIGHT HAND
LEFT HAND
BELT
RIGHT LEG
LEFT LEG
GROUND

Battlescape Control Bar


Soldier's left arm
Descend soldier
Ascend soldier
View down next level
View up next level
Stand/ kneel soldier
Map
Center display on soldier
Equip soldier
Deselect current soldier
Select next soldier
Display options menu
Split level view
Abort Mission
End turn
Soldier's right arm
20
Boris Zhdanovich
31
57
38
100
Free movement
Reserve TUs
Rank
Reserve for aim shot
Reserve for auto shot
Reserve for snap shot
Soldiers Name
Soldier Data: TUs left Energy Health Morale

For every kind of computer user, there is a SYBEX book.

All computer users learn in their own way. Some need straightforward and methodical explanations. Others are just too busy for this approach. But no matter what camp you fall into, SYBEX has a book that can help you get the most out of your computer and computer software while learning at your own pace.

Beginners generally want to start at the beginning. The **ABC's** series, with its step-by-step lessons in plain language, helps you build basic skills quickly. For a more personal approach, there's the **Murphy's Laws** and **Guided Tour** series. Or you might try our **Quick & Easy** series, the friendly, full-color guide, with **Quick & Easy References**, the companion pocket references to the **Quick & Easy** series. If you learn best by doing rather than reading, find out about the **Hands-On Live!** series, our new interactive multimedia training software. For hardware novices, there's the **Your First** series.

The **Mastering and Understanding** series will tell you everything you need to know about a subject. They're perfect for intermediate and advanced computer users, yet they don't make the mistake of leaving beginners behind. Add one of our **Instant References** and you'll have more than enough help when you have a question about your computer software. You may even want to check into our **Secrets & Solutions** series.

SYBEX even offers special titles on subjects that don't neatly fit a category—like our **Pushbutton Guides**, our books about the Internet, our books about the latest computer games, and a wide range of books for Macintosh computers and software.

SYBEX books are written by authors who are expert in their subjects. In fact, many make their living as professionals, consultants or teachers in the field of computer software. And their manuscripts are thoroughly reviewed by our technical and editorial staff for accuracy and ease-of-use.

So when you want answers about computers or any popular software package, just help yourself to SYBEX.

For a complete catalog of our publications, please write:

SYBEX
SYBEX Inc.
2021 Challenger Drive
Alameda, CA 94501
Tel: (510) 523-8233/(800) 227-2346 Telex: 336311
Fax: (510) 523-2373

SYBEX is committed to using natural resources wisely to preserve and improve our environment. As a leader in the computer book publishing industry, we are aware that over 40% of America's solid waste is paper. This is why we have been printing the text of books like this one on recycled paper since 1982.

This year our use of recycled paper will result in the saving of more than 15,300 trees. We will lower air pollution effluents by 54,000 pounds, save 6,300,000 gallons of water, and reduce landfill by 2,700 cubic yards.

In choosing a SYBEX book you are not only making a choice for the best in skills and information, you are also choosing to enhance the quality of life for all of us.

TALK TO SYBEX ONLINE.

JOIN THE SYBEX FORUM ON COMPUSERVE®

- Talk to SYBEX authors, editors and fellow forum members.
- Get tips, hints, and advice online.
- Download shareware and the source code from SYBEX books.

If you're already a CompuServe user, just enter GO SYBEX to join the SYBEX Forum. If you're not, try CompuServe free by calling 1-800-848-8199 and ask for Representative 560. You'll get one free month of basic service and a $15 credit for CompuServe extended services—a $23.95 value. Your personal ID number and password will be activated when you sign up.

Join us online today. Enter GO SYBEX on CompuServe.
If you're not a CompuServe member,
call Representative 560 at 1-800-848-8199

(outside U.S./Canada call 614-457-0802)

CompuServe®

SYBEX
Shortcuts to Understanding

X-COM STRATEGIES AND SECRETS

NEIL RANDALL

SYBEX®
SAN FRANCISCO
PARIS
DÜSSELDORF
SOEST

Acquisitions Manager: Kristine Plachy
Developmental Editor: Gary Masters
Editor: Peter Weverka
Project Editor: Michelle Khazai
Technical Editor: Gabriel Turk
Book Designer: Ingrid Owen
Chapter Art: Lucie Živny
Technical Art: Cuong Le
Desktop Publisher: Deborah A. Bevilacqua
Production Assistant: Dave Nash
Indexer: Matthew Spence
Cover Designer: Archer Design
Cover Illustrator: Richard Kriegler
Editorial Assistant: Stephanie La Croix

SYBEX is a registered trademark of SYBEX Inc.

TRADEMARKS: SYBEX has attempted throughout this book to distinguish proprietary trademarks from descriptive terms by following the capitalization style used by the manufacturer.

Every effort has been made to supply complete and accurate information. However, SYBEX assumes no responsibility for its use, nor for any infringement of the intellectual property rights of third parties which would result from such use.

Copyright ©1995 SYBEX Inc., 2021 Challenger Drive, Alameda, CA 94501. World rights reserved. No part of this publication may be stored in a retrieval system, transmitted, or reproduced in any way, including but not limited to photocopy, photograph, magnetic or other record, without the prior agreement and written permission of the publisher.

Library of Congress Card Number: 95-67376
ISBN: 0-7821-1671-X

Manufactured in the United States of America
10 9 8 7 6 5 4 3 2 1

DEDICATION

This book is dedicated to the designers of the great strategy games I've known and loved—Chess, Scrabble, War in Europe, Frederick the Great, Terrible Swift Sword, Stratego, Empire Builder, Civil War, M.U.L.E., Archon, Seven Cities of Gold, Railroad Tycoon, Empire, SimCity, and, of course, X-COM.

ACKNOWLEDGMENTS

Thanks to the play-testers who helped me master this rich and complex game: Catherine Adams, Michelle Adams, and Rob Kaptein.

And to Gary Masters and Michelle Khazai at Sybex, for resisting the urge to fly to my home and torture the last few chapters out of me.

CONTENTS AT A GLANCE

Introduction xix

PART ONE: PLAYING THE GAME 1

ONE Global War! 3
TWO Getting Bases Ready for Combat 25
THREE Combat on the Tactical Display 49

PART TWO: STRATEGIC OPERATIONS 73

FOUR Mastering the Air Game 75
FIVE Managing Your Bases 91
SIX Research and Manufacturing 109

PART THREE: TACTICAL OPERATIONS 123

SEVEN Getting Prepared to Meet the Enemy 125
EIGHT Searching and Destroying 137
NINE Knowing Your Enemy 149

PART FOUR: ENDGAME 167

TEN How to Win at X-COM 169
ELEVEN Final Voyage and Final Battle 177

APPENDICES 187

A Reading the Charts and Tables 189
B Online Sources of X-COM Material 193

Index 197

Introduction xix

PART ONE: PLAYING THE GAME

ONE GLOBAL WAR! 1

Starting Your First Game 4
The Geoscape 4
  Viewing Different Parts of the Globe 6
  What the Symbols on the Geoscape Mean 7
  The Time Controls 7
The Options Button—Saving, Loading, and Abandoning Games 8
The UFOpaedia—Adding to Your Knowledge of the Game 10
The Graphs Button— Data at a Glance 12
The Funding Button—Seeing Member Country Contributions 13
The Intercept Button—Intercepting an Alien Aircraft 13
  Intercepting UFOs 15
  And if Your Interception Is Unsuccessful… 17
  If the Enemy Is Intercepted… 18
  Intercepting Ground Targets 23
The Bases Button—On to the Base Display 23

TWO GETTING BASES READY FOR COMBAT 25
Introducing Bases 27
Purchasing Equipment/Recruiting Personnel 29
Selling Items/Sacking Personnel 31

Conducting Research 31
  Starting a Research Project 32
  Completing a Research Project 34
Manufacturing Items 36
  Producing New Items 38
  What to Do with Manufactured Items 39
Building New Bases 39
Building Facilities on Bases 41
Equipping Your Aircraft 42
  Equipping Interceptors 42
  Equipping Troop Transports 44
Transferring Stuff from Base to Base 46
Getting Base Information 47
Getting Soldier Information 48

THREE **COMBAT ON THE TACTICAL DISPLAY** **49**

Entering and Leaving the Tactical Display 50
Equipping Soldiers for Battle 51
Your Turn, My Turn 53
What Are Time Units? 54
Exploring the Battlescape 55
  Determining What You See 56
  Different Levels in the Battlescape 57
  Seeing the Overhead Map 58
Sending Soldiers to Battle 59
  Selecting New Soldiers to Fight With 60
  Soldier Data 61
  Moving Soldiers 64
Firing Weapons 65
  Finding Targets to Fire at 65
  Firing at Targets 66
  Getting a Shot Away 69

Ending a Turn 70
Aborting a Mission 70
Saving a Game 70

PART TWO: STRATEGIC OPERATIONS

FOUR MASTERING THE AIR GAME 75
Buying and Building Aircraft 76
- Interceptor 77
- Skyranger 78
- Firestorm 80
- Lightning 81
- Avenger 83
- How Many Aircraft Do I Need? 84

Equipping Aircraft 85
- Equipping Interceptor Aircraft 85
- Equipping Transport Aircraft 86
- Equipping the Soldiers on Board 87

Choosing Where to Fight 89
Mastering the Air Game: A Checklist 90

FIVE MANAGING YOUR BASES 91
How Many Bases Do I Need? 92
Placing Bases around the Globe 93
Facilities for Your Bases 95
- Types of Facilities 96
- Base Defenses Comparison Table 102

Personnel for Your Bases 102
- Soldiers 103
- Scientists 105
- Engineers 105

Charting Your Progress 106
  The Base Information Chart 106
Managing Your Bases: A Checklist 108

SIX RESEARCH AND MANUFACTURING 109
Key Research Strategies 110
What to Research 112
  Lasers 112
  Alloys and Plasma 112
  Aliens 113
  Aircraft
The Research Charts 115
Key Manufacturing Strategies 117
What to Manufacture 118
  Laser and Plasma Weapons 118
  Alien Alloys 119
  Avenger Aircraft 120
  Manufacturing Profits Table 120
  Should You Spread Research and Manufacturing Bases Around? 120
Research and Manufacturing: A Checklist 121

PART THREE: TACTICAL OPERATIONS

SEVEN GETTING PREPARED TO MEET THE ENEMY 125
Keeping Your Head in Battle 126
Giving Soldiers the Right Equipment 127
  Equipment Planning at the Base 127
  Equipment Planning at the Site 129
Who Wants to Go First? 131
  Seeing What's Out There 132

Reserving Time Units for Opportunity Fire 133
Getting Prepared to Meet the Enemy: A Checklist 135

EIGHT SEARCHING AND DESTROYING 137

Ground Strategies for Deploying Soldiers 138
  The 360-Degree Coverage Strategy 139
  Approaching a UFO 140
Bringing the Right Weapons to Battle 141
  Pistols and Rifles 142
  Explosives 143
  Tanks, a Lot 146
The Combined Arms Strategy 147
Searching and Destroying: A Checklist 148

NINE KNOWING YOUR ENEMY 149

Face to Face with the Aliens 150
  The Eleven Types of Aliens 151
  Alien Ranks 152
  A Catalogue of Alien Races 153
Strategies for Attacking Alien Sites 159
  Bases 159
  Crash Sites 160
  Landing Sites 160
  Terror Sites 161
Strategies for Halting Alien Missions 161
  Abductions 161
  Base Building 161
  Harvest Missions 162
  Infiltrations 162
  Research Missions 162

Retaliations 163

Supply Missions 163

Terror Missions 163

Identifying Alien Aircraft 163

PART FOUR: ENDGAME

TEN HOW TO WIN AT X-COM 169

Capture, Salvage, Interrogate 170

The Two Essential Pieces of the Puzzle 171

The Avenger 171

Cydonia or Bust 172

Capturing an Alien Commander 173

How to Bag an Alien Commander 174

Interrogating an Alien Commander 176

ELEVEN FINAL VOYAGE AND FINAL BATTLE 177

Launching the Cydonian Mission 178

Arriving at Cydonia 179

The Battle among the Pyramids 180

The Cydonian Base 181

Endgame 182

APPENDICES

A READING THE CHARTS AND TABLES 189

Graphs from the Global Display 190

UFO Activity in Areas 190

UFO Activity in Countries 191

X-COM Activity in Areas 191
X-COM Activity in Countries 192
Income 192
Finance 192

B ONLINE SOURCES OF X-COM MATERIAL 193
CompuServe 194
The Internet 196

Index 197

FROM FIRST GAME TO ENDGAME

The year 1999 isn't far away. No one has any real idea what the world will be like by then, but we're all pretty sure that not much will change. We'll have jobs of one kind or another, we'll be spending some of our extracurricular time in virtual reality, and Windows 2000, just around the corner, will finally look just like the Mac. Same as usual, same as always.

Unless, that is, the world unfolds as a game called "X-COM: UFO Defense" suggests it might.

By 1999, X-COM's designers tell us, unidentified flying objects will appear in various parts of the world. All those stories about abductions and experiments will suddenly be for real, not the stuff of science fiction or the perversities of a sick mind. It will be a terrible place, this good old planet of ours, and for the first time in history all nations will join hands and brains and dollars. We'll have no choice if we want to survive the alien menace.

In 1998, Japan will take the lead by establishing a force of its own to combat the invaders. Half a year later, Japan will give up entirely, with nothing whatsoever to show for its efforts. Whoever the aliens are, wherever they come from, they'll be more than capable of outfoxing individual nations, even the most powerful ones. This time, acting alone won't work. This time, the world will have to unify whether it wants to or not.

And so, on 11 December 1999, the countries of the world will meet in Geneva to form for the first time a League of Nations truly meant to uphold the peace. This time, upholding the peace will mean driving away alien invaders. The world, quite clearly, will never be the same.

On that day in December less than five years away, the world will create a research and combat unit to do whatever must be done to solve this global crisis. To this unit will be sent the best soldiers, pilots, scientists, and engineers. The unit will be given the most advanced technology the world has to offer. It will be charged with learning the invaders' secrets and with fighting them off. Its success—or failure—will determine the survival or collapse of the human race.

The unit will be called the Extraterrestrial Combat Unit. But like all long names, this one will be shortened. To the nations who depend on it for survival, the unit will simply be known as X-COM.

And whether X-COM succeeds is entirely up to you.

THE STRATEGIC AND THE TACTICAL GAME

"X-COM: UFO Defense" is a global strategy game. Your mission is to save the world from the alien invasion. But X-COM is much more than a strategy game. Incorporated into X-COM is a highly detailed yet extremely playable tactical game in which individual soldiers fight for their lives and aliens try to kill them or gain control of their minds.

What makes the game so fascinating is that the two parts, the strategic and the tactical, fit so well together. As a strategist, you make sure the aliens don't slip past the earth's defenses. As a tactician, you work every bit as hard as a troop commander to fight off alien hordes on the ground. And this brings us to another aspect of X-COM—it's also a role-playing game. You get to know your soldiers as individuals. You watch them rise through the ranks and, with luck, survive the entire campaign.

Strategy, tactics, and role-playing. X-COM is stunning, and even though it has an ending, the game is worth playing over and over again. Try *that* with most other computer games.

PLAYING THE GAME

You start by placing an X-COM base anywhere you want on earth. The base is equipped with everything you need to get going—soldiers, ships, scientists, engineers, laboratories, workshops, hangars, and a radar defense system. Your task is to put all these resources and facilities to work. The world is paying you to fight off the aliens, and you have to prove your worth.

See, the nations of the world provide funding for the X-COM project. As long as you keep the earth clear of invaders, the nations will be happy to keep funding you. And if you do a great job, they might even increase your funding. But if you fail to keep the aliens from establishing bases and terrorizing cities, one by one the nations will cut off their support of X-COM.

THE STRATEGIC SIDE

On the strategic side of the game, you do whatever is necessary to keep the money rolling in. You need several months of continuing support in order to send the aliens packing. You have to find alien artifacts and sell them for additional funds, and start up a manufacturing program to get more weapons both for your soldiers and for resale purposes.

You need funding for all sorts of reasons. Soldiers, scientists, and engineers have to be recruited and paid. Weapons, ammunition, and armor must be purchased and upgraded. You need to build more facilities on your home base and build new bases from scratch. Everything is expensive, and there's never enough cash to go around.

So you build, you buy, you recruit, and you research. And then you manufacture and you sell, and you build and you buy some more. All well and good, except there's a niggling little problem. The aliens keep coming and you have to deal with them.

THE TACTICAL SIDE

Your radar system will spot UFOs as they approach the earth. Your task is to intercept them and get rid of them. This means either shooting them down and mopping up the wreckage, or waiting until the UFOs land and assaulting the aliens on the ground. Either way, you end up on the tactical side of the game, in which you must guide individual soldiers across the landscape. The soldiers kill or capture aliens and bring home artifacts and information.

If you don't intercept the UFOs, you're in for serious trouble. Some of the UFOs will land and establish "terror sites" in order to harass and brutalize cities. Worse, some will land on earth and establish secret bases. Secret bases are hard to find, and even when you find them, they're extremely difficult to eliminate. To take out terror sites and secret bases, you need all the tactical skill you can muster. If you fail, the nations who have been terrorized by the aliens will slash their X-COM funding.

The ultimate goal is to destroy the alien menace completely. That means—well, let's save it for later. For now, why not just get started?

HOW THIS BOOK WILL HELP YOU DEFEAT THE ALIENS

X-COM is a complex game. Not from the interface point of view (the interface is quite straightforward), but in the strategic sense. Actually, "complex" might not be the right word—"rich" is more like it. Mastering the fine points of this excellent game takes time and thought, and it's easy to get sidetracked.

Since you've bought this book, you probably already know all of this. You know that getting X-COM defenses established is difficult, as is knocking out alien crash sites, terror sites, and bases. You've probably reached the point where you've tried everything but you can't get any further in the game. You've discovered how strong this game really is and you have no intention of letting it beat you.

X-COM Strategies and Secrets gets you past those barriers. It shows you how to make the most of your funds and personnel, both strategically and tactically. It shows you how to play the game from beginning to end and offers suggestions toward a winning strategy.

What this book *doesn't* do is give you the perfect plan for winning. Why? Because as far as I can figure out, there isn't one. There are lots of *im*perfect plans, and plenty of plans that are just plain wrong, but the perfect one has yet to reveal itself. My play-testers and I have worked with this game for hour after hour, we've read the comments posted on the online services, and we haven't found a perfect plan. So I think it's time to conclude that one doesn't exist.

That's why I say this book offers *suggestions* toward a winning strategy, not a winning strategy. This book offers possibilities, not certainties. In a well-designed game, there is no such thing as a certainty. And "well-designed" most definitely describes X-COM.

WHAT THIS BOOK COVERS

X-COM Strategies and Secrets takes you from your first mission through the final showdown. Well, sort of. It gets you going, certainly, with descriptions far more detailed than the ones in the tutorial you receive with the game manual. Toward the end of this book, you'll see exactly what happens when you take that final leap. But most of this book offers tips, guidelines, and hints for winning the game. I don't walk you through the game because every mission plays out differently. Your mission could never be the same as anything I could come up with on my own. X-COM doesn't work that way. That's what makes it such a valuable game.

Here's what you'll find in the four parts of the book and the appendices:

Part One: Playing the Game X-COM's interface isn't hard to learn, but there's a great deal for you to do. Part One guides you through the game's three prominent interfaces: the Global Display, the Base Display, and the Tactical Display.

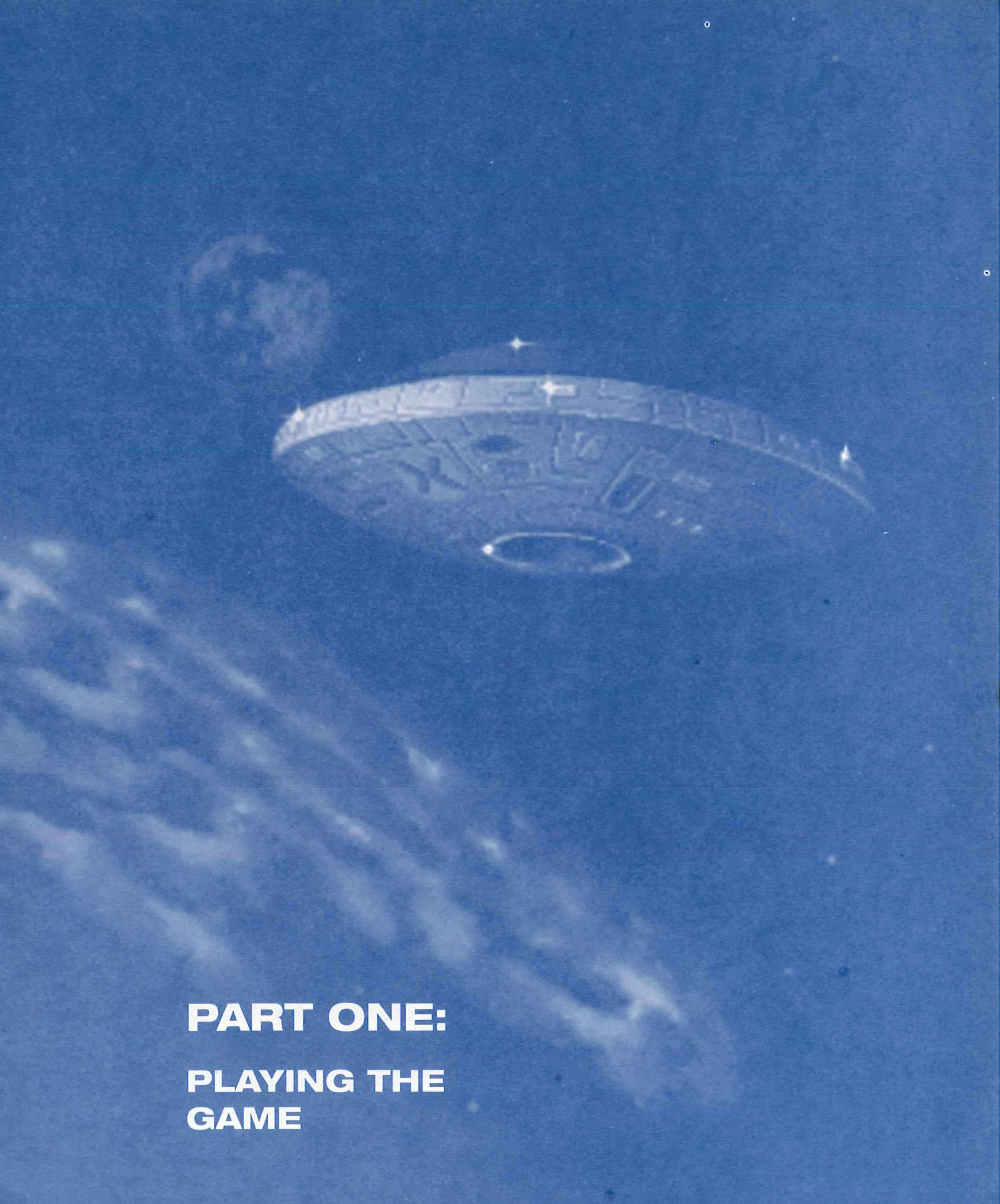
Part Two: Strategic Operations Part Two provides a detailed look at strategic operations. Included here are guidelines for building and placing new bases, for operating bases effectively, and for establishing a global defense system. Funding is explained with a goal toward helping you maintain a sufficient supply of operating capital. Details about the research and manufacturing arm of your enterprise are provided as well. You'll learn what to do and what to avoid in order to make your way through to the final mission.

Part Three: Tactical Operations A great deal of X-COM is played on the tactical battlefield. Time and again, you'll find yourself fighting to knock out an alien-infested landscape, where mastery of weaponry, stealth, and tactical formations is essential. In Part

Three, you'll learn how to make the best use of your own weapons and how to use the aliens' own weapons against them. You'll learn how to flush out aliens from buildings, what types of arms to take into battle, and how to make use of forward observers. I also provide hints for wrapping up tactical missions with a minimum of losses and for capturing aliens rather than killing them.

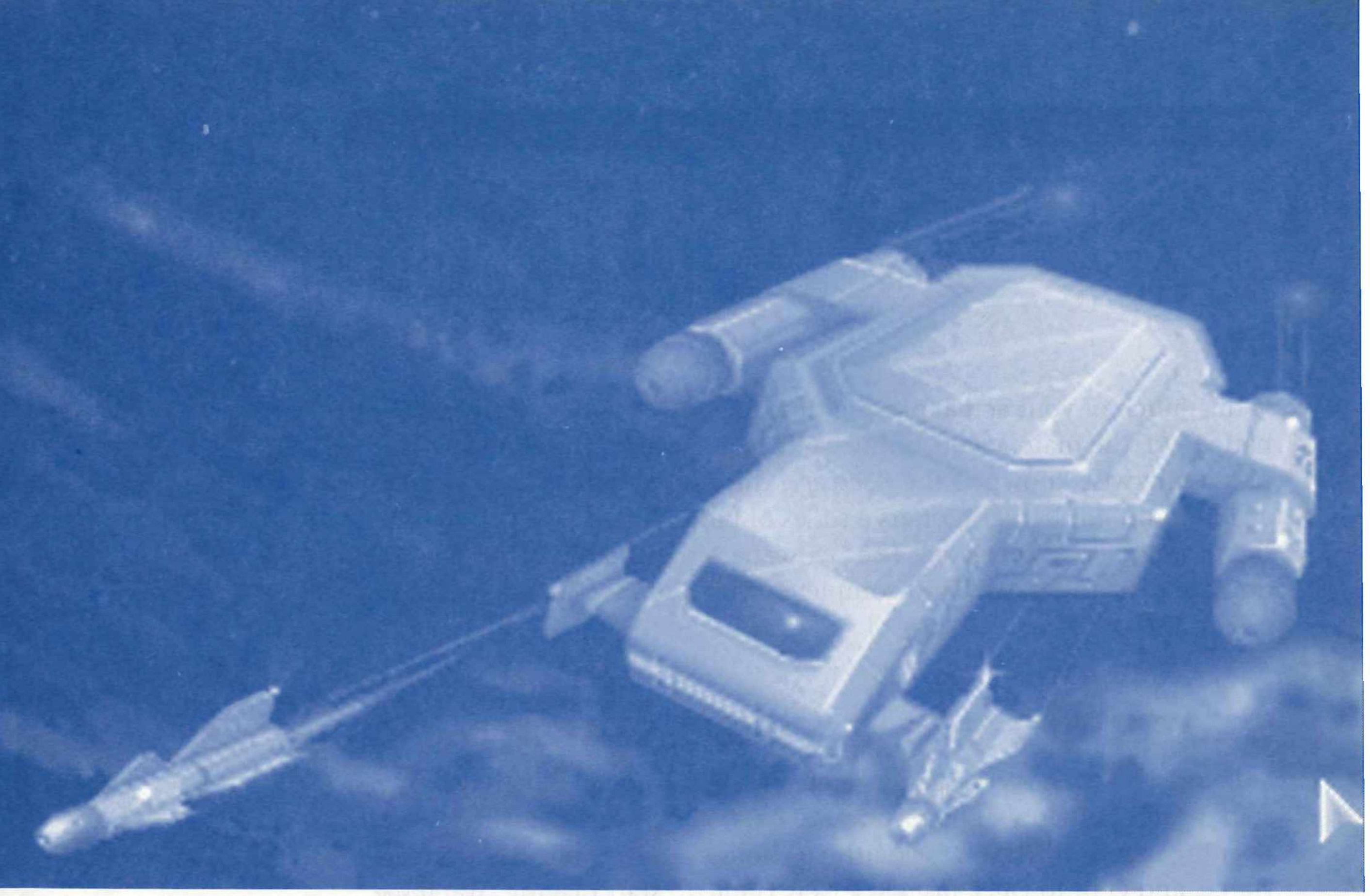
Part Four: Endgame No matter how much you enjoy the challenge of X-COM, sooner or later you'll want to play out the ending. Included in *X-COM Strategies and Secrets* is a guide to conducting the final mission. In the final mission, your battle-hardened soldiers come face to face with...but that would be telling. If you want to know how the game ends, Part Four tells all. If not—well, just don't read Part Four. At least, not until you've solved this game on your own, which is, after all, the fun part.

Appendices X-COM comes packed with details, and its most dedicated fans have provided hints and "cheat" programs of their own. Appendix A explains the charts and graphs you encounter throughout the game. Go to Appendix B to learn about what you can discover online from X-COM players every bit as addicted as you are. X-COM has inspired many detailed discussions, arguments, and program add-ons, a sure testimony to its strength as seen through the eyes of its players.



PART ONE:

PLAYING THE GAME



CHAPTER ONE

GLOBAL WAR!

While much of your actual playing time in X-COM will be spent on the battlefield, the main events of the game take place on the Global Display. Otherwise known as the *Geoscape,* this display pictures the earth as a globe, and, to the right, offers a series of buttons that take you to other important parts of the game. The Geoscape is pretty simple, but if you don't understand it early and completely you'll limit your chances of success in X-COM.

STARTING YOUR FIRST GAME

Before you even get to see the Global Display, though, you have to start a game. When you first load X-COM, you're presented with the opening menu, which gives you three choices—New Game, Load Saved Game, and Quit to DOS. Just click New Game to start playing. You'll see the Select Difficulty Level box. I'll talk about difficulty levels a little later. For now, choose Beginner. No sense trying to be a hero until you know what's going on. At this point you'll see the Geoscape.

THE GEOSCAPE

The Geoscape features a globe that you can view from a variety of perspectives. Figure 1.1 shows the earth at the start of the game, from the most distant perspective and centered on the United States.

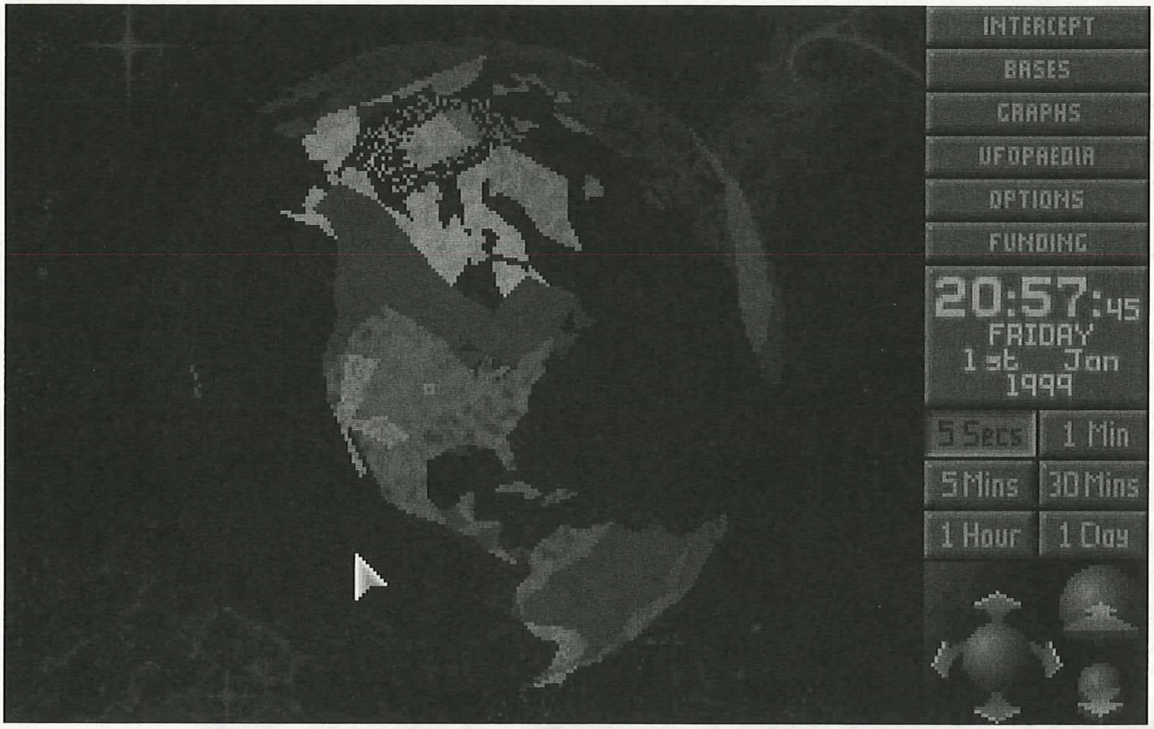
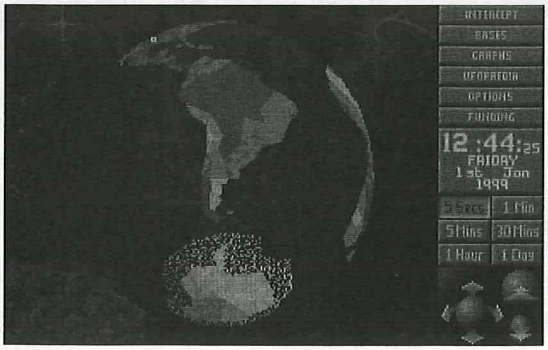

INTERCEPT
BASES
GRAPHS
UFOPAEDIA
OPTIONS
FUNDING
20:57:45
FRIDAY
1st Jan
1999
5 Secs
1 Min
5 Mins
30 Mins
1 Hour
1 Day

FIGURE 1.1 *X-COM's full global display. This is how the earth looks at the start of the game.*

Night and day operate in X-COM exactly as they do in the real world, and you can watch the darkness work its way across the world's face. In the graphic, the perspective has switched to one centered on the continent of Antarctica. You can see the nightfall coming on.


INTERCEPT
BASES
GRAPHS
UFOPAEDIA
OPTIONS
FUNDING
12:44:25
FRIDAY
1st Jan
1999
5 Secs
1 Min
5 Mins
30 Mins
1 Hour
1 Day

As the graphic shows, you can change your perspective on the planet by rotating the globe. Since you'll eventually be operating bases around the globe, and focusing in on crash sites, terror sites, and alien bases in practically every continent, being able to see any part of the earth is crucial.

VIEWING DIFFERENT PARTS OF THE GLOBE

To rotate the globe, you use the *View controls* at the bottom right of the Global Display. The icon on the left—the one with a globe and four protruding arrows—handles this rotation. Clicking on the left arrow spins the globe from west to east, while the right arrow does the opposite. Clicking on the top arrow rotates the earth from north to south, while the bottom arrow rotates it south to north.

This is a wee bit confusing at first, so think of each arrow as pulling a part of the globe towards you. If you want to focus on the Arctic ocean, for example, pull the Arctic towards you by selecting the top arrow. If you want to see Europe, pull it your way with the right arrow, and so on.

The other two View control icons let you zoom in and out. Use the larger icon to zoom in and see a specific area in greater detail, and use the smaller one to zoom out and give yourself a wider perspective on what's transpiring. Figure 1.2 shows a view of an X-COM base in mid-U.S.A., zoomed in as far as it will go. Notice that the names of cities are visible from here, as are other details.

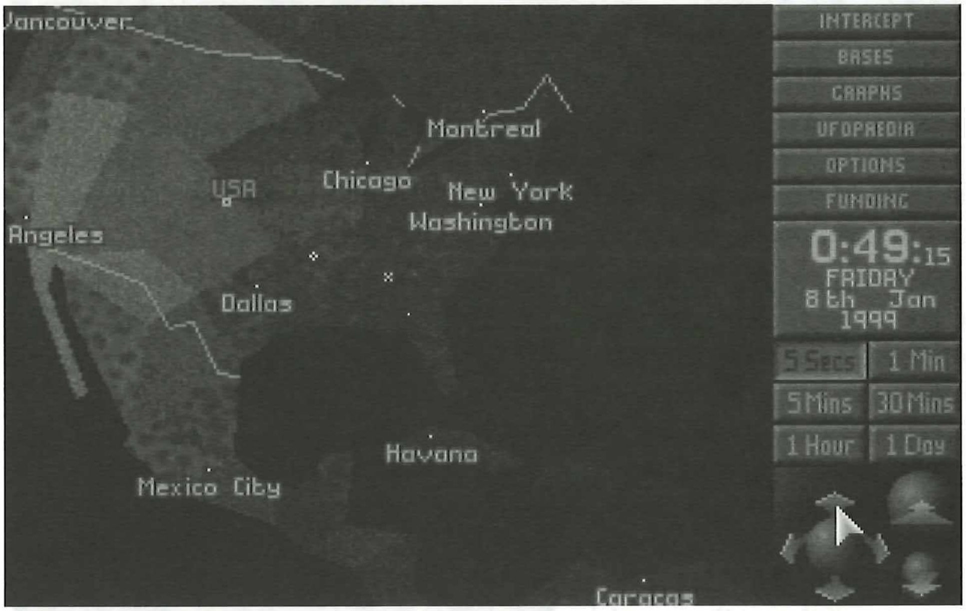

Vancouver
Montreal
USA
Chicago
New York
Washington
Angeles
Dallas
Havana
Mexico City
Caracas
INTERCEPT
BASES
GRAPHS
UFOPAEDIA
OPTIONS
FUNDING
0:49:15
FRIDAY
8th Jan
1999
5 Secs
1 Min
5 Mins
30 Mins
1 Hour
1 Day

FIGURE 1.2 *Zooming in on an X-COM base. Zoom in by clicking a View Control icon in the lower-right corner of the Geoscape.*

WHAT THE SYMBOLS ON THE GEOSCAPE MEAN

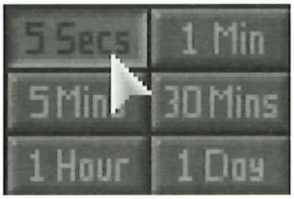
The Geoscape displays many items besides cities, lakes, oceans, and political boundaries. Here's what all those crosses, X's, and squares are:

Crosses (+)	*Yellow crosses* are X-COM ships. X-COM ships become visible as soon as you launch an interceptor or troop transport from a base.
	Red crosses are enemy ships currently in flight.
	Orange crosses are X-COM ship's way points. A *way point* is a destination point. Orange crosses only appear if the destination isn't an enemy craft or site.
X's	*Green X's* are enemy ships that have landed and are undamaged. As such, they represent landing sites.
	White X's are enemy ships that have been shot down. They represent crash sites.
	Pink X's are alien terror sites. Terror sites are always located in populated areas.
Squares	*Blue squares* are X-COM bases. Your first base will be displayed as a blue square as soon as the game starts.
	Pink squares are alien bases. You should assault them as soon as possible.

THE TIME CONTROLS

Above the View controls on the Global Display are the *Time controls.* By default, X-COM progresses in five-second increments. Watching things happen on the Global Display in five-second spurts means spending a huge amount of playing time just sitting around and waiting for something to kick in. By increasing the time increment, you can tell the game to speed up until an event takes place, at which time you can switch back to the five-second default.

Changing time increments is simply a matter of clicking on the appropriate Time control button. The 5 Secs button is useful for giving orders, such as intercepting UFOs or launching your transport craft to a crash site. The 1 Min and 5 Mins buttons are beneficial when following the path of UFOs as they cross the earth, or when watching your interceptors chase these vessels through the sky.



Another useful control is the 1 Day button. After you've established a research or manufacturing project, and you have nothing left to do until it is finished or another event occurs, you can click the 1 Day button to move the game forward quickly enough to move to the next stage.

Above the Time Controls is the Time Display. For the most part, you can ignore the Time Display, since events will usually transpire whether or not you know what time or day it is. But you need to keep the Time Display in mind as each month draws to a close, since your facilities and forces need to be maintained—that is, paid for—at the end of the month. If you're planning to release some scientists or dismantle some aircraft, near month's end is the time to do it.

12 :22:35
FRIDAY
1 st Jan
1999

THE OPTIONS BUTTON—SAVING, LOADING, AND ABANDONING GAMES

Notice the Options button, the fifth one down on the right side of the Geoscape. Clicking on the Options button yields a menu with three items on it:

Menu Item	**What It Does**
Save Game	Saves the current game
Load Saved Game	Loads a game you saved earlier
Abandon Game	Abandons the game you're currently playing (that is, you give up)

Saving a Game

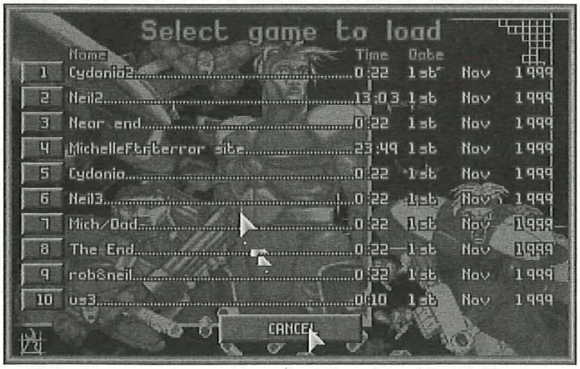
Choose Save Game to store your progress in the current game on your hard disk. As you'll quickly discover, you should save games often. Any time you do a number of things—such as establishing research and manufacturing projects or wiping out a couple of incoming UFOs—save the game so you don't have to do it all again. When you save a game, save it under a name that describes the game or situation as closely as possible so you can recognize it later.

WANT TO SEE MORE THAN 10 GAMES?

One problem with the Save feature is that you can save only ten games. You'll quickly wish you could save more than ten, and, if you really want to, you can. Just make a copy of the entire game, with all the files and subdirectories, somewhere else on your hard drive, then play from whichever game is applicable at any given time. A bit clumsy, but it works.

Loading a Game

Setbacks are common in X-COM, and often your best bet is to admit that you've blown it and go back to a previously saved game where things were going reasonably well. Selecting Load Saved Game from the Options menu lets you do exactly that. You're taken to the Select game to load box, where you choose the game you wish to resume. The game will restart at precisely that point, allowing you to remake decisions that didn't work out or simply hope for better results.



Select game to load

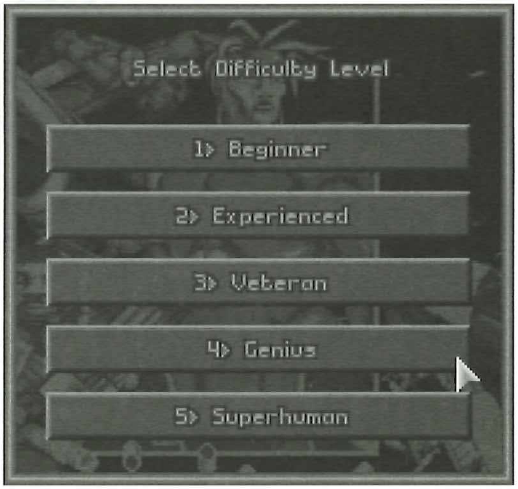
	Name	Time	Date
1	Cydonia2	0:22	1st Nov 1999
2	Neil2	13:03	1st Nov 1999
3	Near end	0:22	1st Nov 1999
4	MichelleFtrterror site	23:49	1st Nov 1999
5	Cydonia	0:22	1st Nov 1999
6	Neil3	0:22	1st Nov 1999
7	Mich/Dad	0:22	1st Nov 1999
8	The End	0:22	1st Nov 1999
9	rob&neil	0:22	1st Nov 1999
10	us3	0:10	1st Nov 1999

Apart from the name of the saved game, the most important information on the Select game to load box is the game date. The date is especially important if you fire up X-COM after not having played for a few days (perish the thought) and you don't remember which saved game is which. The game dates can help you here, especially if you're looking for the game in which you've progressed the furthest.

Abandoning a Game

Choosing Abandon Game takes you to X-COM's opening menu. From there you can start a new game from scratch, load a previously saved game, or forget the whole thing and exit to DOS so you can do some real work (trust me, you'll be back).

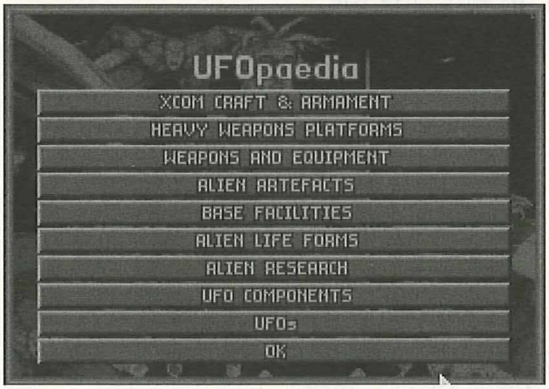
If you select New Game from the opening menu, you'll see the Select Difficulty Level box. From here you select your preferred difficulty level, from Beginner, the easiest level, to Superhuman, the hardest.



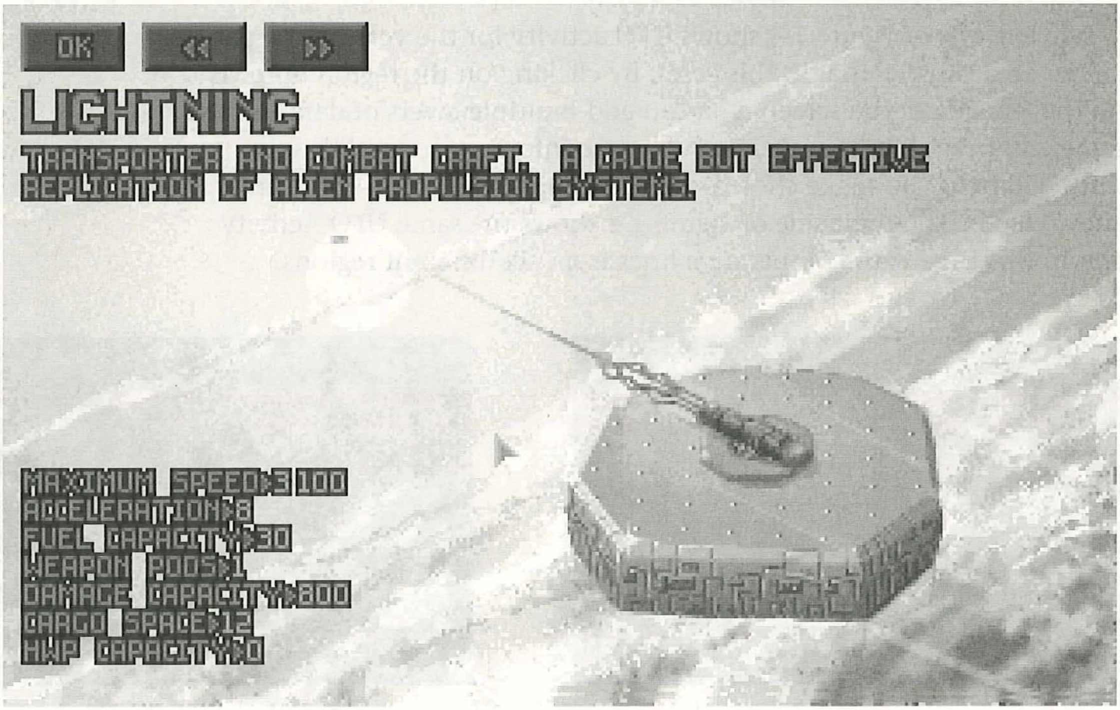
For your first game, it's best to select Beginner. No sense trying to be a hero until you know what's going on, and, unlike most games, Beginner doesn't mean easy. At the Beginner level you have to perform all the tasks and make all the decisions that are necessary at the Veteran and Superhuman levels as well. The only difference between the various levels has to do with the aliens. As you increase difficulty levels, the aliens' abilities increase as well. They become more aggressive and they can do you in much faster.

THE UFOPAEDIA—ADDING TO YOUR KNOWLEDGE OF THE GAME

As you make your way through the game, you'll gain an increasing knowledge about both yourself and the aliens who confront you. Fortunately, you don't have to write down all you learn, because X-COM provides a particularly useful feature called the *UFOpaedia*. It operates as a database with everything you need to know about your own capabilities and those of the invaders.


UFOpaedia
XCOM CRAFT & ARMAMENT
HEAVY WEAPONS PLATFORMS
WEAPONS AND EQUIPMENT
ALIEN ARTEFACTS
BASE FACILITIES
ALIEN LIFE FORMS
ALIEN RESEARCH
UFO COMPONENTS
UFOs
OK

Clicking on the UFOpaedia button on the Global Display yields the UFOpaedia main menu. At the beginning of the game, some information is already available in the first three items, X-COM Craft & Armament, Heavy Weapons Platforms, Base Facilities, and Weapons and Equipment. The rest, all dealing with UFOs and aliens, are entirely empty. As you do battle, capturing artifacts, ship components, and aliens themselves, you add to your stock of knowledge, and the UFOpaedia grows in size and usefulness. Figure 1.3 shows a UFOpaedia item from late in the game, information obtained by interrogating an alien engineer.



LIGHTNING

TRANSPORTER AND COMBAT CRAFT. A CRUDE BUT EFFECTIVE REPLICATION OF ALIEN PROPULSION SYSTEMS.

MAXIMUM SPEED>3100
ACCELERATION>8
FUEL CAPACITY>30
WEAPON PODS>1
DAMAGE CAPACITY>800
CARGO SPACE>12
HWP CAPACITY>0

FIGURE 1.3 *UFOpaedia entry from late in the game. This information was obtained by interrogating an alien engineer.*

The UFOpaedia's main purpose is to help you refresh your memory. As you research each item, information about its purpose is displayed on the screen, but you can't possibly remember it all. By entering the UFOpaedia, you can call up the identical screen and see the information again.

THE GRAPHS BUTTON—DATA AT A GLANCE

Although they might seem unimportant at first, the charts available from X-COM's Graphs menu tell you a great deal about what you can expect, and what you have to do. You display the Graphs menu by clicking on the Graphs button on the Global Display. Six graphs in all are accessible here, each with its own significant data. Appendix A discusses how to read and interpret the graphs. For now, what's important to know is that they offer multiple layers of detail.

The left side of Figure 1.4 shows UFO activity for the year in one particular area (Australasia, in this case). By clicking on the region buttons on the left side of the screen, you can add multiple layers of data to this same graph. In doing so, you can compare information, and this, in turn, will help you make choices about building bases, patrolling areas, and so forth. The right side of Figure 1.4 shows the same UFO Activity graph, this time with comparative lines from six different regions.

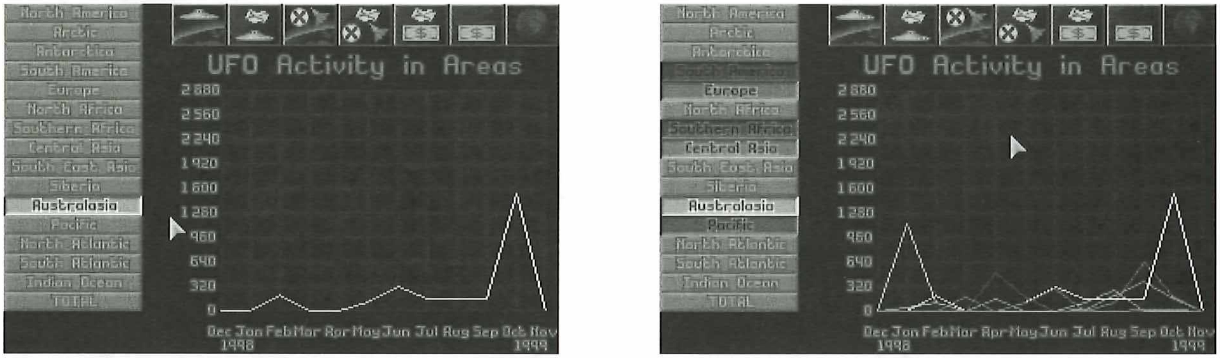
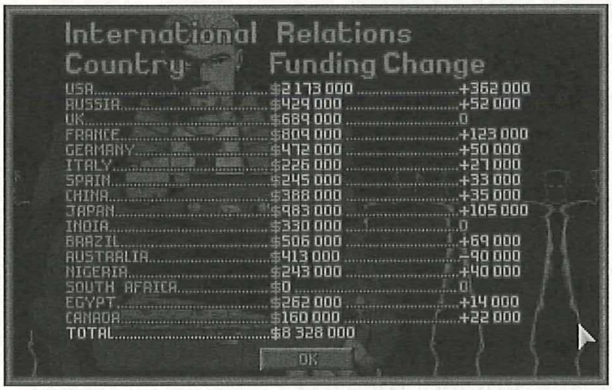

North America
Arctic
Antarctica
South America
Europe
North Africa
Southern Africa
Central Asia
South East Asia
Siberia
Australasia
Pacific
North Atlantic
South Atlantic
Indian Ocean
TOTAL
UFO Activity in Areas
2880
2560
2240
1920
1600
1280
960
640
320
0
Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov
1998
1999

FIGURE 1.4 *A graph showing UFO activity in Australasia (left) and one showing how activity in Australasia compares to activity in six more regions (right)*

Other graphs give you detailed information about X-COM activity, X-COM income, and other financial details. The trick is to call them up periodically as you play, and increasingly as you plan new bases and new facilities. Graphs won't win the game for you, but they'll help you make the right decisions. See appendix A for details.

THE FUNDING BUTTON—SEEING MEMBER COUNTRY CONTRIBUTIONS

The bottom-most button on the Global Display is the Funding button. Click this button and you'll see the Funding chart, a useful summary of how much various member countries have contributed to the X-COM initiative. This chart becomes especially important as countries change their funding levels.



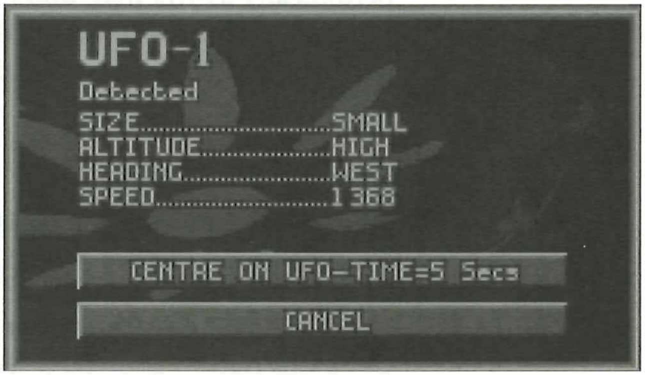
International Relations

Country	Funding	Change
USA	$2 173 000	+362 000
RUSSIA	$429 000	+52 000
UK	$689 000	0
FRANCE	$809 000	+123 000
GERMANY	$472 000	+50 000
ITALY	$226 000	+27 000
SPAIN	$245 000	+33 000
CHINA	$388 000	+35 000
JAPAN	$983 000	+105 000
INDIA	$330 000	0
BRAZIL	$506 000	+69 000
AUSTRALIA	$413 000	–90 000
NIGERIA	$243 000	+40 000
SOUTH AFRICA	$0	0
EGYPT	$262 000	+14 000
CANADA	$160 000	+22 000
TOTAL	$8 328 000	

At the close of every game month, you're given a progress report showing which countries were elated with your performance, which were merely satisfied, and which were disappointed. While you might not want to let anyone down, the important point is that elation leads to increased funding, while disappointment leads to funding cuts. Use the Funding screen to see exactly who's doing what, then take action to eliminate problems. This means paying particular attention to countries who were disappointed by your performance, in hopes of regaining lost income.

THE INTERCEPT BUTTON—INTERCEPTING AN ALIEN AIRCRAFT

The Intercept button is the only one on the Global Display that leads to immediate game action. Its purpose is to launch aircraft. This button is by far the most significant in the entire game, because all combat missions, whether by air or on the ground, begin from here.


UFO-1

Detected

SIZE..............SMALL
ALTITUDE..........HIGH
HEADING...........WEST
SPEED.............1368

X-COM bases house sophisticated radar detection equipment. When a UFO approaches the earth, this equipment is supposed to detect the UFO's existence and report its size and location to X-COM headquarters.

When a UFO is detected, a window appears saying as much in the Geoscape. In the window are two buttons, one called Cancel and one called Centre on UFO–Time=5 Secs:

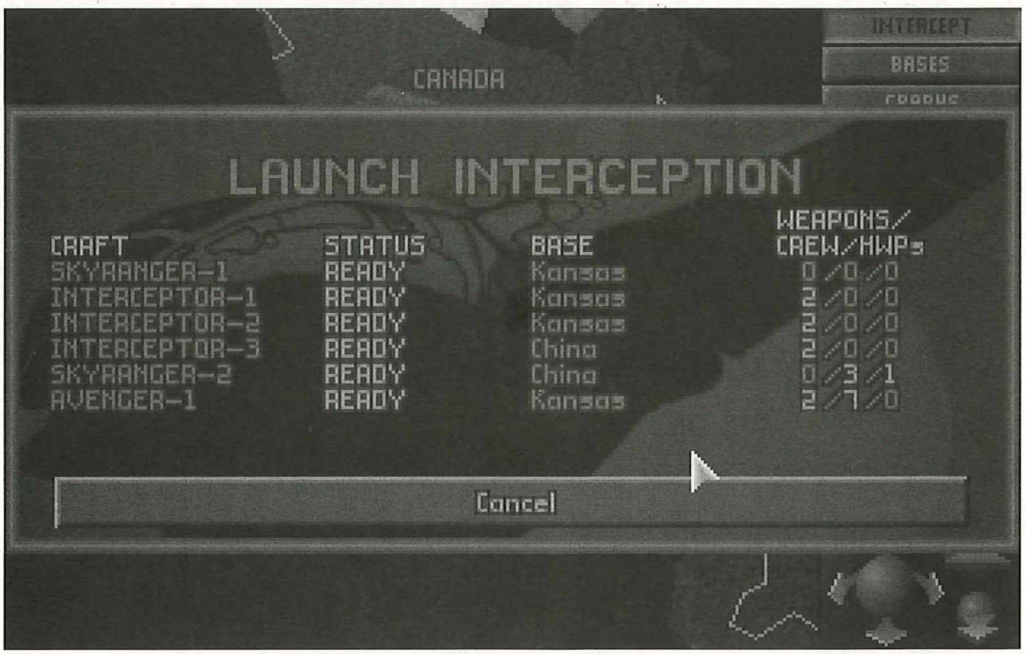
- **Cancel** Clicking this button tells the game that you're not going to bother with the UFO, which is generally a bad decision but possibly one you have no choice about at the moment.
- **Centre on UFO –Time=5 Secs** Clicking this button tells the game to center the globe on the detected UFO and return the game to the default five-second time interval if it's not already there. Usually, you'll choose to do this, if only to discover where the UFO is headed. The UFO is indicated by a red cross in the center of the globe.

At this stage, you haven't actually done anything yet. You know where the UFO is and some details about its size, speed, and altitude. The UFO, however, is still free to do whatever it wants. You can wait until it lands, in which case it's represented by a green X, or until it disappears from radar detection.

The problem with doing nothing is that UFOs rarely just fly away harmlessly. Undetected UFOs, or ones that get away, usually land and harass or terrorize the area in which they've set down. Sometimes they even establish alien bases. In short, you want to wipe out as many as possible. If too many get through, your combat resources will be taxed to the maximum.

INTERCEPTING UFOs

To confront a UFO that your radar has detected, click on the Intercept button. You'll see the Launch Interception window, an example of which appears in Figure 1.5.



LAUNCH INTERCEPTION

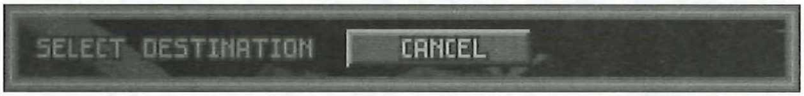
CRAFT	STATUS	BASE	WEAPONS/ CREW/HWPs
SKYRANGER-1	READY	Kansas	0/0/0
INTERCEPTOR-1	READY	Kansas	2/0/0
INTERCEPTOR-2	READY	Kansas	2/0/0
INTERCEPTOR-3	READY	China	2/0/0
SKYRANGER-2	READY	China	0/3/1
AVENGER-1	READY	Kansas	2/7/0

FIGURE 1.5 *A typical Launch Interception window*

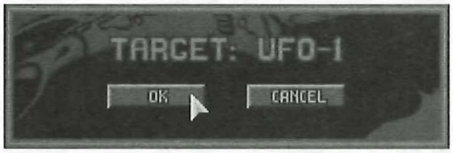
Lots of important detail here. First is the type of craft, ranging from the Skyranger (a troop transport ship with no air-to-air weapons), to the Interceptor class, and up through the essential Avenger. The Status column tells you whether the ship is ready, in which case you can launch it, or whether it's refueling, rearming, in repairs, or away from the base, in which case you can't. You're also told where the ship is based and how many weapons, crew members, and heavy weapons platforms it is carrying.

The Launch Interception window is where you assign X-COM craft the task of interception. Simply click on the ship you want to perform the mission, and as long as it's available you can send it out to get the UFO.

As soon as you choose your ship, the Launch window disappears and a Select Destination window appears at the top of the Geoscape.



Click on the UFO, which is represented by the red cross, and a small Target window also appears:



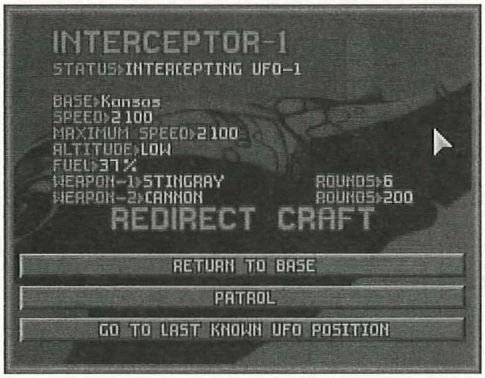
As soon as you click OK to give the go-ahead, you see the Geoscape in full, with the UFO shown as a red cross and your interceptor as a yellow cross (it starts on the base). To avoid having to watch the interceptor crawl towards the UFO, click on the 1 Min or 5 Mins button in the Time Controls area. This will speed up the interception process considerably.

DIFFERENT WAYS TO LAUNCH SHIPS

Besides clicking on the Intercept button, you can get to the Launch Interception window by clicking on an X-COM base as it appears on the globe (X-COM bases are marked by blue squares). Doing so gives you access to all the ships on that base, but none from other bases. Ships from one base are all you need early in the game, but later you'll have multiple bases and various classes of aircraft to draw from. At times you'll want to combine ships from different bases in an interception (you can launch as many as you want, one at a time). To combine ships, use the Intercept button, which gives access to all bases.

AND IF YOUR INTERCEPTION IS UNSUCCESSFUL...

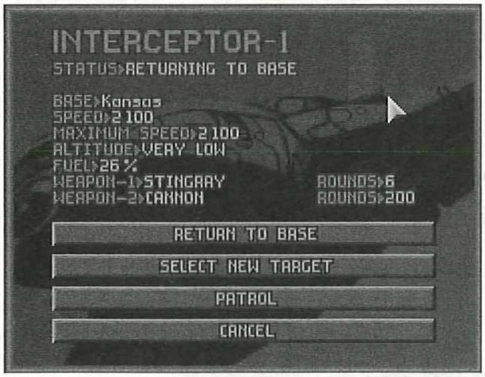
Once you've selected the UFO as your target, your interceptor will attempt to track it down and confront it. Sometimes, however, the UFO will outrun your interceptor, in which case you'll be presented with a Tracking Lost window. Immediately after this, you'll see a Redirect Craft window for your interceptor.



INTERCEPTOR-1
STATUS>INTERCEPTING UFO-1
BASE>Kansas
SPEED>2100
MAXIMUM SPEED>2100
ALTITUDE>LOW
FUEL>37%
WEAPON-1>STINGRAY ROUNDS>6
WEAPON-2>CANNON ROUNDS>200

From the Redirect Craft window, you have three choices for what to do with the ship. By pressing one of the buttons at the bottom of the screen, you can send the ship back to base (the usual response), direct it to the last known UFO location, or have the ship patrol the airspace in its current location. The latter two commands are useful if you suspect the UFO landed undetected. By clicking the Patrol button, you can find enemy sites and bases, and sometimes even pick up the trail of a UFO once it leaves the area.

If you direct the interceptor to the last known UFO location and it arrives without finding anything, it immediately begins patrolling the area. You'll be shown a window telling you that the ship has reached the desired "way point" (that is, the destination). From this window, you can either click the OK button to have the ship start patrolling or click the Redirect Craft button to order it elsewhere.



INTERCEPTOR-1
STATUS>RETURNING TO BASE
BASE>Kansas
SPEED>2100
MAXIMUM SPEED>2100
ALTITUDE>VERY LOW
FUEL>26%
WEAPON-1>STINGRAY ROUNDS>6
WEAPON-2>CANNON ROUNDS>200

The Redirect Craft button yields the Craft Status window. This window lets you send the ship back to base, patrol in place, or select a new target. Clicking on either Patrol or Select a New Target, the last two options, gives you the full Geoscape once again, and you can click on any location you want your ship to go. Being able to go to any location is particularly useful if two UFOs have been detected near one another, because you can switch from one UFO to the other without returning to base.

NOTE

The Craft Status window is available any time a ship is away from its base. Simply click on the yellow cross that represents the ship on the Geoscape.

Eventually, your ships will run out of fuel, at which point a window will appear telling you that they must return to base. It's never a good idea to stay out when you see this message, since you could run out of fuel and crash.

IF THE ENEMY IS INTERCEPTED...

Unsuccessful interceptions mean not having to do much, but that's not what you're after. What you want is a confrontation with the UFO, and that means successfully intercepting it. In Part Two, we'll see how to maximize the chances of making a successful interception. For now we'll just take a look at what happens when it occurs.

When your interceptor reaches the UFO, you're presented with the Air-to-Air Combat window shown in Figure 1.6. The Air-to-Air Combat window has several sections. Keep referring to Figure 1.6 as we work our way through them, or else look at the inside front cover of this book, which also shows the Air-to-Air Combat window.

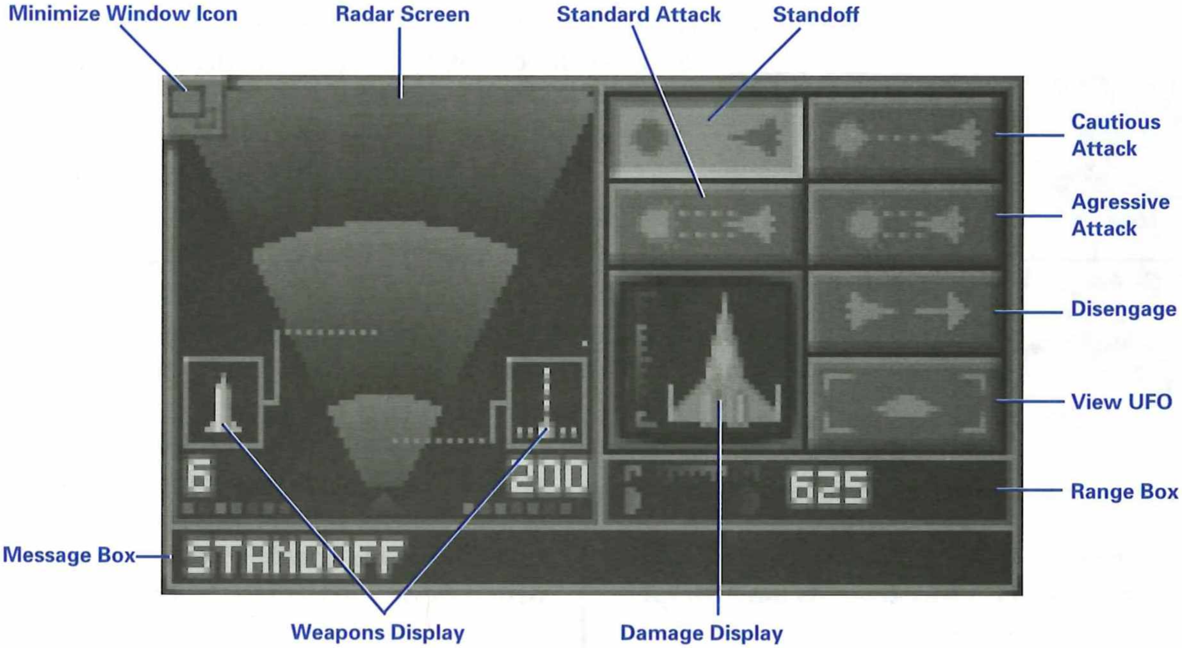

Minimize Window Icon
Radar Screen
Standard Attack
Standoff
Cautious Attack
Agressive Attack
Disengage
View UFO
Range Box
Message Box
Weapons Display
Damage Display
6
200
625
STANDOFF

FIGURE 1.6 *The frequent and essential Air-to-Air Combat window*

TAKE THE AIR-TO-AIR COMBAT WINDOW SERIOUSLY!

If you learn all the options of no other window in the whole game, take the Air-to-Air Combat window very, very seriously. Much of the game relies on how you handle interceptions, and this window offers the most fundamental means of making things happen. Use it well, and you'll accomplish most of your necessary tasks.

Radar Screen The largest part of the Air-to-Air Combat window, located on the left side, is the Radar Screen. It shows you the progress of the combat. The UFO is represented by a round circle—a blip, if you will—that starts the combat at the top of the Radar Screen. As you fire at the UFO, its distance from the interceptor changes, and you see your blasts as they move towards the enemy craft.

Inside the Radar Screen, at bottom left and right, are the Weapons Displays. These show what weapons systems you're using (up to two), and how much ammunition remains in each weapon. You can't actually do anything with these windows; they're simply there to tell you if you're running low on ammunition.

Minimize Window icon To the top-left of the Radar Screen is a small box called the Minimize Window icon. Clicking here clears the Air-to-Air Combat window from the Geoscape so you can watch your interceptor follow the UFO. The Air-to-Air Combat window appears as a small icon in the top-left of the Geoscape, and clicking on it restores it to its standard size.

The main purpose of the Minimize Window icon is to let you see where air-to-air combat is taking place. Early in the game, your goal is to force UFOs to crash-land so you can send your troops in to mop up by salvaging artifacts and destroying or capturing aliens. If you force a crash-landing over water, however, the UFO is lost for good (it sinks). By minimizing the Air-to-Air Combat window, you can watch the display and wait until the UFO is over land.

TIMING IS EVERYTHING!

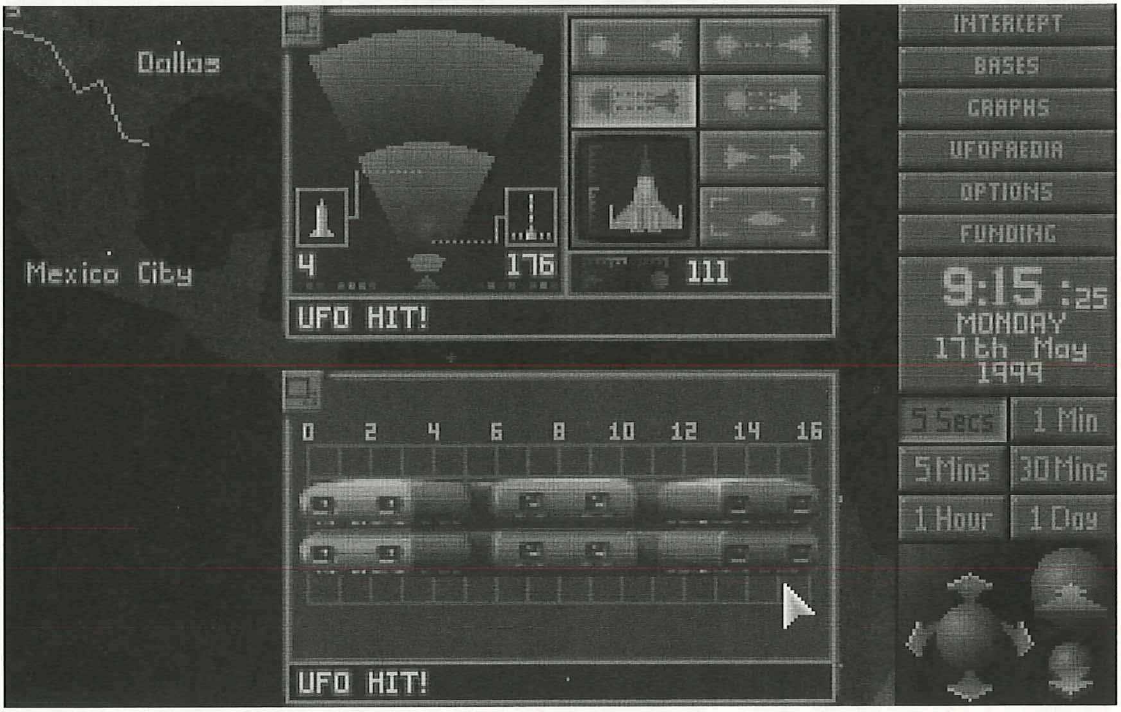
When the window is minimized, use the 1 Min or 5 Mins Time Control to speed up the time it takes the interceptor to catch the UFO. When the UFO is where you want it, click quickly on the 5 Secs button and then on the minimized Air-to-Air Combat window itself.

Message Box Across the bottom of the Air-to-Air Combat window (see Figure 1.6) is the Message Box. It keeps you informed about the progress of the combat. Typical messages include "UFO Hit!" (nice), "UFO Return Fire!" (less nice), "UFO Crash Lands!" (perfect), "Interceptor Damaged!" (whoops), "UFO Destroyed" (sometimes nice), and "Interceptor Destroyed" (a truly bad experience). Another possibility is "UFO Outrunning Interceptor!," which tells you that you're likely to lose track of the UFO. Essentially, it escaped.

Range Box Above the Message Box, on the right half of the Air-to-Air Combat window, the Range Box gives the distance between your interceptor and the UFO. It's useful primarily as a means of determining if you should close in with an aggressive attack, or back off for the sake of caution.

Damage Display To the upper-left of the Range Box is the Damage Display. Here you'll see the damage inflicted on the interceptor. A representation of the interceptor appears in the display, and each time it takes a hit, a growing portion of it is covered in red. If you've taken several hits from a larger UFO, and you've inflicted only a few on the enemy, it's time to withdraw and head back to base.

View UFO Button The View UFO button, to the right of the Damage Display and immediately above the Range Box, gives you a look at the UFO itself, as shown in Figure 1.7. Except to see the enemy vessel's size, it's not especially useful.


Dallas
Mexico City
4
176
111
INTERCEPT
BASES
GRAPHS
UFOPAEDIA
OPTIONS
FUNDING
9:15 :25
MONDAY
17th May
1999
0 2 4 6 8 10 12 14 16
5 Secs
1 Min
5 Mins
30 Mins
1 Hour
1 Day

UFO HIT!

UFO HIT!

FIGURE 1.7 *A large UFO, as displayed via the View UFO button*

Order Buttons The remainder of the Air-to-Air Combat window is taken up by the Order buttons (see Figure 1.6 for the location of these buttons). There are five of these, each with a different function, and with them you control the course of the battle:

Button	**What It Does**
Standard Attack	Clicking here tells the interceptor to move towards its weapons minimum range from the UFO and start firing at a "standard" rate. This button forces a well-paced combat and minimizes ammunition usage. It is located immediately above the Damage Display.
Aggressive Attack	Click here when you want to blast at the UFO without concern for ammunition or defense. As with a standard attack, you'll end up at your weapons' minimum range, but the rate of fire will be higher. This button is located to the right of the Standard Attack button.
Cautious Attack	Clicking here moves your interceptor into position at its weapons maximum range from the UFO. Its purpose is to minimize the chances that your UFO will take damage. This button is located directly above the Aggressive Attack button.
Standoff	Clicking here moves your UFO beyond weapons range but still in contact. This is useful if you want to simply follow the UFO, and is the only position that allows you to use the Minimize Window icon. The Standoff button is located above the Standard Attack button.
Disengage	Clicking here orders a retreat, known in Monty Python lore as "Run Away!" If you've taken damage, you might be forced to use this button. It has a picture of the interceptor facing the other way.

After an attack has concluded, and if the UFO is still flying, the Standoff button is automatically highlighted. At this point, you can launch a second attack of the same type, or change to a different variety. Here, too, you can click on the Minimize Window icon, or (for shame!) the Disengage button.

INTERCEPTING GROUND TARGETS

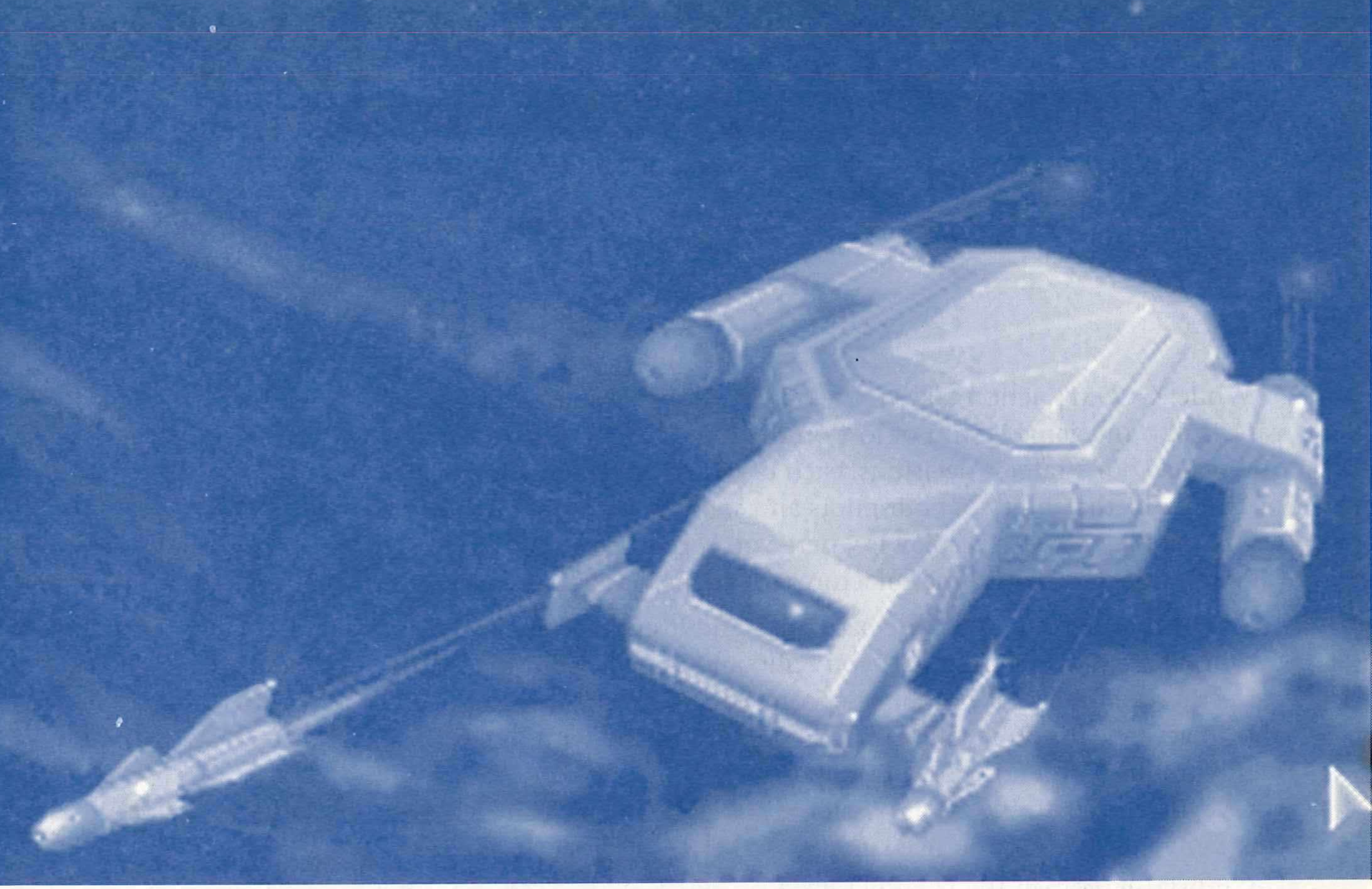
The Intercept button on the Global Display is also used to send ships to ground targets. Primarily, you use this feature to send your troop transports—initially the Skyranger—to a crash site, a landing site, a terror site, or an alien base. The procedure for sending ships to ground targets is the same as sending ships to intercept alien spacecraft, except that you select a ground site as your ship's destination.

You can also send combat interceptors against ground targets, although this is useful only for attacking undamaged UFOs on the ground. Effectively, you're telling the interceptor to hover above the site until the UFO takes off, at which time you'll engage it in air-to-air combat.

You can also use the troop transport for an air-to-air interception, with the goal of remaining at standoff distance and waiting for the UFO to land. The idea here is to let the UFO land, and then have the troop transport pounce on it. Undamaged UFOs offer substantially more booty than those that have crash-landed.

THE BASES BUTTON—ON TO THE BASE DISPLAY

Finally, we come to the Bases button, the second button in the upper-right corner of the Global View. Clicking on it takes you to the Base Display, which is covered in Chapter 2. I guess you better turn the page.



CHAPTER TWO

GETTING BASES READY FOR COMBAT

T W O

While X-COM's action takes place on the Global Display and the Tactical Display, the game is won or lost on the Base Display. This is where you make your strategic decisions, each of which affects, either directly or indirectly, the ability of your pilots and soldiers to complete their crucial missions. The Base Display is where you conduct research to decipher the final puzzle and manufacturer the items required to solve it.

You begin the game with one base only, and it's practically impossible to win unless you build more. If you build and manage your first base perfectly, and if luck takes your side from start to finish, you might be able to get by with only your initial base. But winning with one base is highly unlikely and not worth trying until you've exhausted all the other possibilities this game has to offer. You need at least two powerful bases at the Beginner level and five or six more at the Superhuman level to have any chance of destroying the alien menace completely. You must manage each new base separately, even though all draw on the same funding. The base portion of X-COM is a game of resource management, difficult to win but not to play.

TIP

You can always click on the Geoscape button on the Base Display to return to the Global Display.

The Base Display interface is not complicated. Each portion of the interface has been carefully designed to make it possible to do whatever you feel is necessary for ultimate success. What's difficult is learning what you need and what you don't need, and this knowledge comes only through a lengthy and demanding process of trial, error, and discovery.

To get to the Base Display, click on the Bases button from the Global Display. This yields a two-part screen with an overhead representation of your initial base on the left and a set of menu buttons on the right. Figure 2.1 shows the initial base.

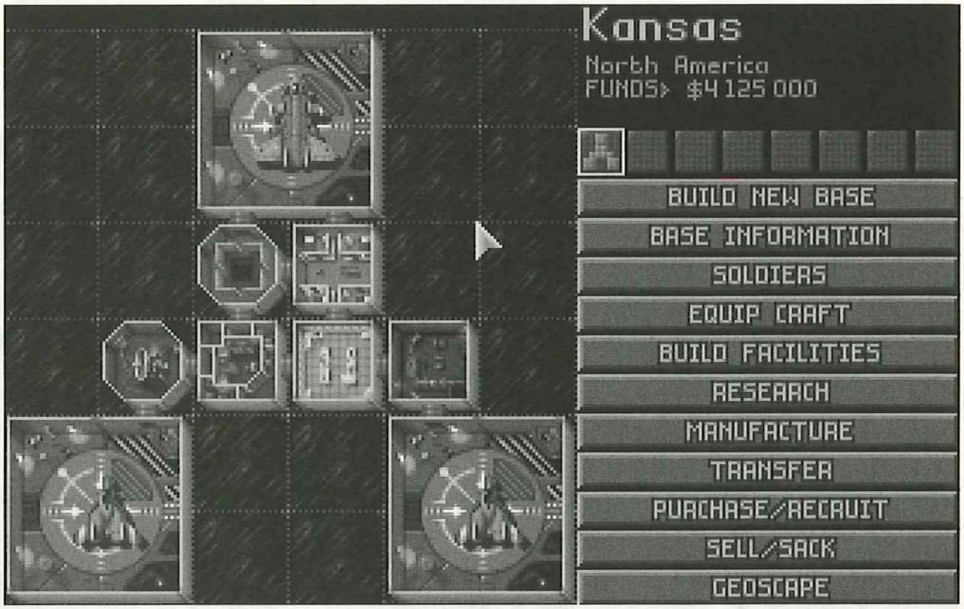

Kansas
North America
FUNDS> $4 125 000
BUILD NEW BASE
BASE INFORMATION
SOLDIERS
EQUIP CRAFT
BUILD FACILITIES
RESEARCH
MANUFACTURE
TRANSFER
PURCHASE/RECRUIT
SELL/SACK
GEOSCAPE

FIGURE 2.1 *The first base, prebuilt and ready for action. The Base Control buttons are on the right.*

INTRODUCING BASES

X-COM bases are underground structures. Each contains the equipment and personnel necessary to conduct a full-scale strategic operation. Bases themselves are displayed in the main window of the Base Display. Each base consists of one or more "facilities," structures ranging from hangars for your aircraft to living quarters for your personnel. A base's exact makeup is entirely up to you.

As Figure 2.1 showed, you don't have to build your first base entirely from scratch. When the game begins, you're given an initial base (otherwise you couldn't do anything), with hangars, quarters, equipment, and personnel already in place. When you begin a new base, however, you're provided with only one facility, the access lift, and the base is functionally useless until you build additional structures. Every new facility takes time and money to build, of course, and you'll find yourself trading off constantly between the needs of one base and the equally important needs of another.

Compare Figure 2.1, the first base you receive, with Figure 2.2, which shows a brand new base with its lonely little access lift.

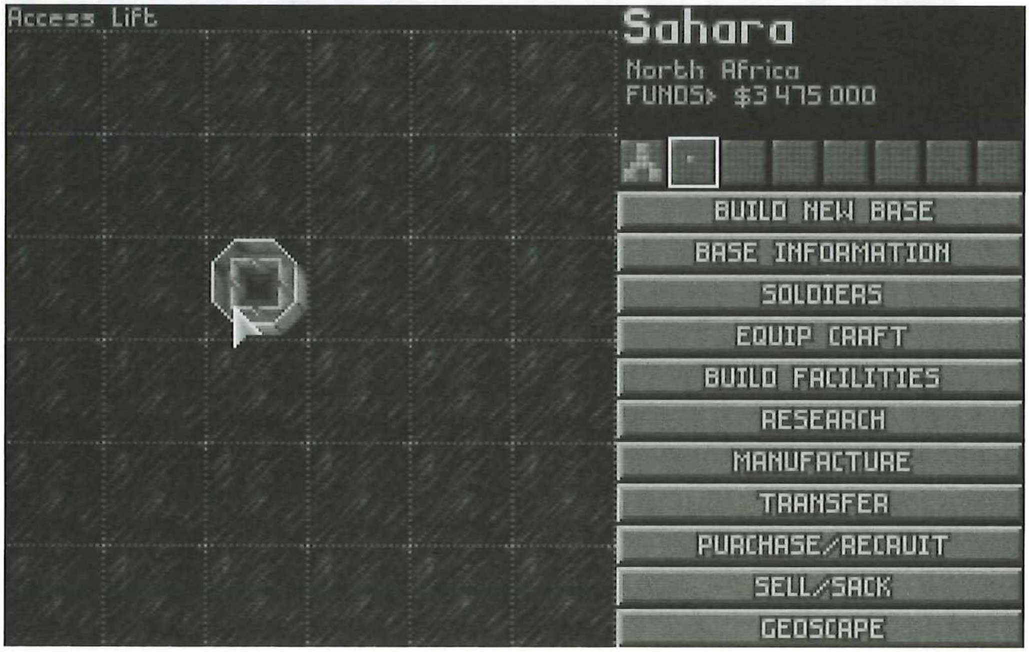

Access Lift
Sahara
North Africa
FUNDS> $3 475 000
BUILD NEW BASE
BASE INFORMATION
SOLDIERS
EQUIP CRAFT
BUILD FACILITIES
RESEARCH
MANUFACTURE
TRANSFER
PURCHASE/RECRUIT
SELL/SACK
GEOSCAPE

FIGURE 2.2 *A new base, with nothing but an access lift*

By moving the mouse pointer over a facility, you can identify it. In fact, each facility is displayed with a different icon, but there's no real reason to memorize which icon is which. Just move the mouse, and you'll find out everything you need to know. Each type of facility has a unique purpose that I'll describe later in this chapter (see "Building Facilities on Bases").

Late in the game, your bases will be fully functioning and rich in facilities, as the graphic shows. Bases are expensive, since every facility must be maintained and personnel need food and other amenities.

Kansas
North America
FUNDS> $2 048 901
BUILD NEW BASE
BASE INFORMATION
SOLDIERS
EQUIP CRAFT
BUILD FACILITIES
RESEARCH
MANUFACTURE
TRANSFER
PURCHASE/RECRUIT
SELL/SACK
GEOSCAPE

The name of the base currently being examined is displayed in big letters at the top-right of the Base Display. Right below the name of the base is the region where it is located and a monetary figure showing how much it cost to build and maintain. Below that is a row of Base icons. To shift your attention from one base to another, click on the appropriate icon. Each icon shows a small representation of a base, with completed facilities in green and facilities under construction in red. After a short while, you'll know which icon belongs to which base merely by looking at it.

NOTE

At least one large base is almost a necessity in X-COM, so the best approach is to make the base self-sustaining. See Part Three for details.

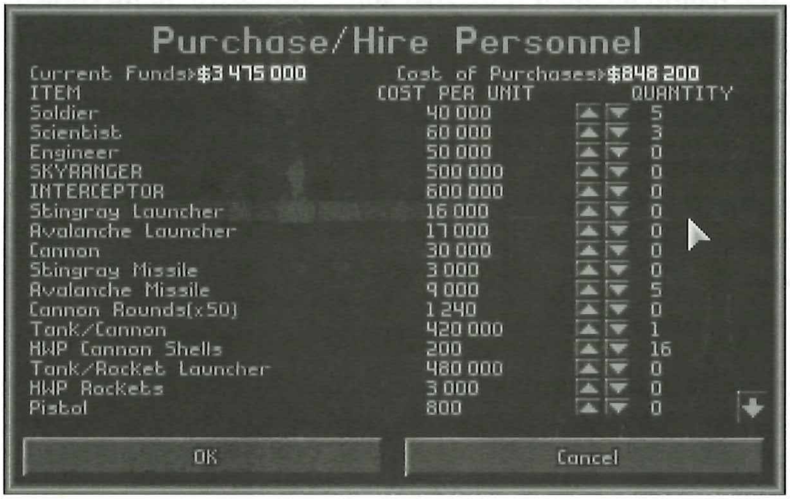
Once you select a Base icon, you can click on a Base Control button (Manufacture, Research, Purchase/Recruit, etc.) to perform a function on the base.

PURCHASING EQUIPMENT/ RECRUITING PERSONNEL

Early in the game, you will use the Purchase/Recruit button more than any other on the Base Display. The reason is simple: You need personnel, and you need equipment. As the game progresses, purchasing and recruiting will become less important, because your personnel will be in place and you'll be manufacturing instead of purchasing equipment. Still, purchasing and recruiting is a vital area to become familiar with early on, because without the right mix of people and materials you won't get very far.

In fact, in this early stage it's very important to recruit scientists and engineers. You need to move forward with your arms manufacturing program if you intend to beat the aliens. As the game progresses, aliens bring more sophisticated weapons to battle.

Clicking on the Purchase/Recruit button yields the Purchase/Hire Personnel window:



Purchase/Hire Personnel

Current Funds>$3 475 000 Cost of Purchases>$848 200

ITEM	COST PER UNIT	QUANTITY
Soldier	40 000	5
Scientist	60 000	3
Engineer	50 000	0
SKYRANGER	500 000	0
INTERCEPTOR	600 000	0
Stingray Launcher	16 000	0
Avalanche Launcher	17 000	0
Cannon	30 000	0
Stingray Missile	3 000	0
Avalanche Missile	9 000	5
Cannon Rounds(x50)	1 240	0
Tank/Cannon	420 000	1
HWP Cannon Shells	200	16
Tank/Rocket Launcher	480 000	0
HWP Rockets	3 000	0
Pistol	800	0

"Current Funds" at the top of the window displays your available funds. This number changes constantly according to funding, spending, and maintenance levels. Below this amount is an item list of the personnel and equipment you can buy. If a small down arrow appears in the bottom-right corner of the window, the window will scroll to reveal more items.

You hire or purchase by clicking the up arrows in the Quantity column. To the left of each up-arrow is the cost per unit of each item, and to the left of that is the item name itself. As you hire or purchase, the running total in the "Cost of Purchases" line above the columns changes to show how much you have spent. For example, if you click the up-arrow twice to hire two soldiers (at $40,000 each) and click the up-arrow once to purchase a Tank/Cannon (at $420,000 each), you'll run up a total of $500,000 in that spending session.

Funds aren't actually spent until you click on the OK button. If you change your mind and decide to buy nothing, click on Cancel. Once you choose OK, however, your money is gone. The cashiers on your base don't accept returns. Once you've paid for it, it's yours. Instead of clicking Cancel, you can unselect specific items/people by clicking on the appropriate down arrow in the Quantity column.

Items and personnel become available within a few days after you purchase or hire them. First, they have to be transferred to your base.

SELLING ITEMS/SACKING PERSONNEL

The Sell/Sack button yields the Sell Items/Sack Personnel window, which looks very much like the Purchase/Hire Personnel window. This time, though, clicking the up-arrows in the right-hand column means you want to sell the item or fire (uh, de-hire) the person. You would do so either to raise additional money or to prevent having to spend money for maintenance. Once you've selected all the items or personnel you wish to get rid of, click the OK button.

START MANUFACTURING IMMEDIATELY!

Selling items becomes increasingly important as the game goes on. As soon as possible, you should start manufacturing items specifically for resale (I discuss manufacturing items later in this chapter). Anything you build can be sold, and many items sell for more than they cost to build. A good manufacturing arm will help your base's economy considerably, and you use the Sell Items/Sack Personnel window to bring the money in.

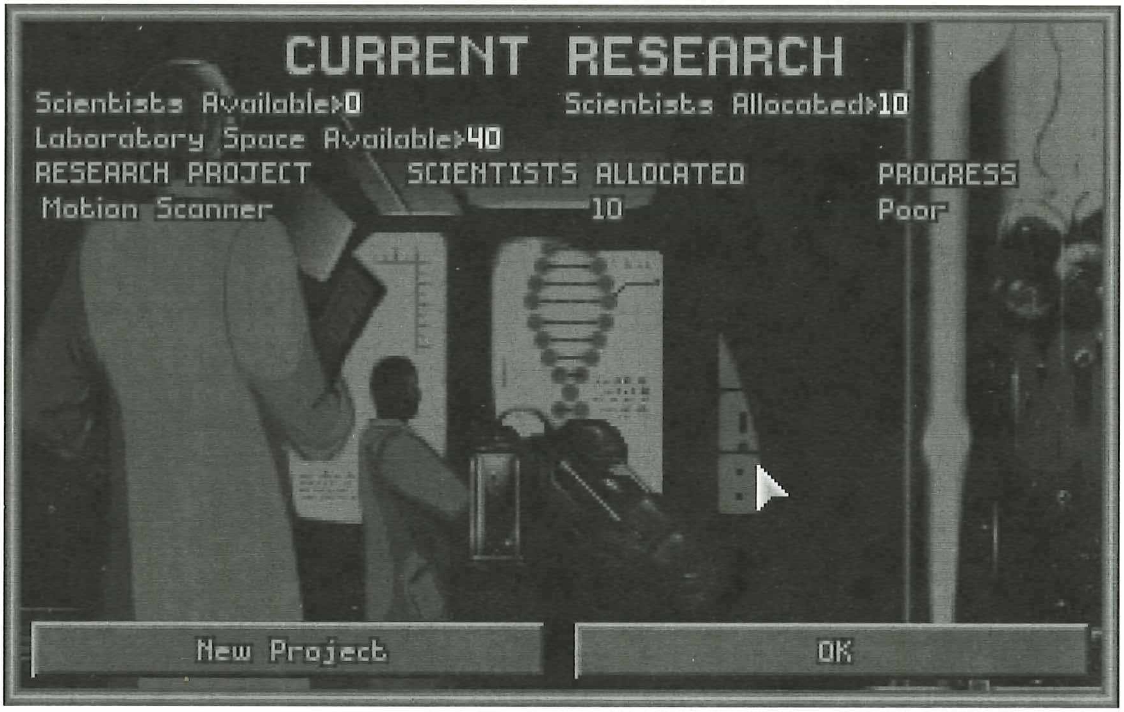
CONDUCTING RESEARCH

No matter how well your troops fight, or how efficiently your ships shoot down UFOs, or how clever you are at constructing bases and radar detection devices, you can't win at X-COM unless you carry out research. Moving through the stages of the game depends entirely on your research program. You'll conduct research on everything from developing strong weapons to discovering the secret of the alien invasion. Research is handled in the labs, and it relies on the skills of scientists.

To conduct research, you need scientists and lab space. At the start of the game you have one lab facility and ten scientists. You should immediately build another lab and hire more scientists. Don't stop after that. Keep building more labs and hiring more scientists. You begin the game with a number of items to research, and your troops will constantly bring more items. A good rule of thumb is this: If you're not doing research, you're not playing this game.

STARTING A RESEARCH PROJECT

To begin a research project, click on the Research button in the Base Display. This will yield the Current Research window, shown in Figure 2.3.



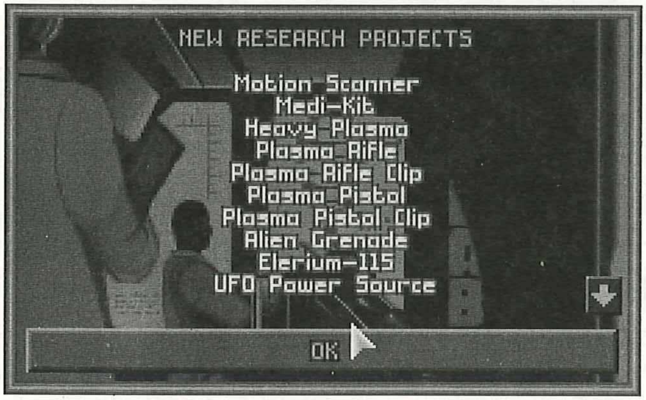
CURRENT RESEARCH

Scientists Available>0
Scientists Allocated>10
Laboratory Space Available>40

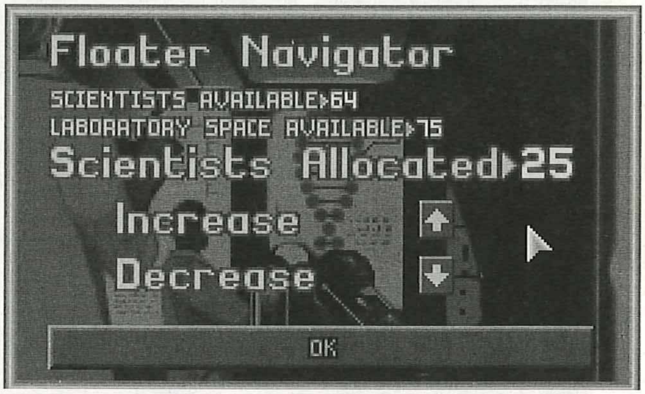
RESEARCH PROJECT	SCIENTISTS ALLOCATED	PROGRESS
Motion Scanner	10	Poor

FIGURE 2.3 *The Current Research window, showing one current project*

If this window shows a research project currently underway, you can access the project by clicking on it. To start a new project, click the New Project button at the lower-left. Doing so brings up the New Research Projects window with a list of items to research. The example shown here is from late in a game.


NEW RESEARCH PROJECTS
Motion Scanner
Medi-Kit
Heavy Plasma
Plasma Rifle
Plasma Rifle Clip
Plasma Pistol
Plasma Pistol Clip
Alien Grenade
Elerium-115
UFO Power Source
OK

To select a new project, click on the item you want to research. The Start Project window will appear, allowing you to change your mind if you wish (by choosing Cancel), but click on the Start Project button to get the project moving. Yet another window will appear, the Scientists Allocated window. From here you set the number of scientists you wish to work on the new project.


Floater Navigator

SCIENTISTS AVAILABLE>64
LABORATORY SPACE AVAILABLE>75
Scientists Allocated>25

Increase
Decrease
OK

To add scientists to the project, click on the up-arrow; to remove scientists, select the down-arrow. Note, however, the figure for laboratory space available. If you hire a large number of scientists but fail to build a new lab facility for them to work in, you'll end up with unallocated scientists. Not only are these scientists useless, they're also expensive to maintain (they cost $60,000 each to hire, remember). If the Scientists Allocated window won't let you assign scientists, either get rid of them (see "Selling Items/Sacking Personnel" earlier in this chapter) or immediately start building new labs.

NOTE

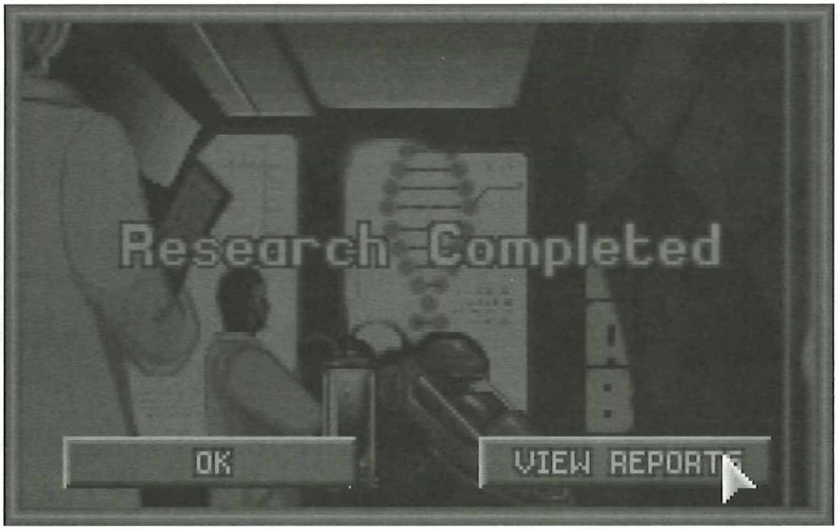
To build new labs, see "Building Facilities on Bases" later in this chapter.

REASSIGNING SCIENTISTS

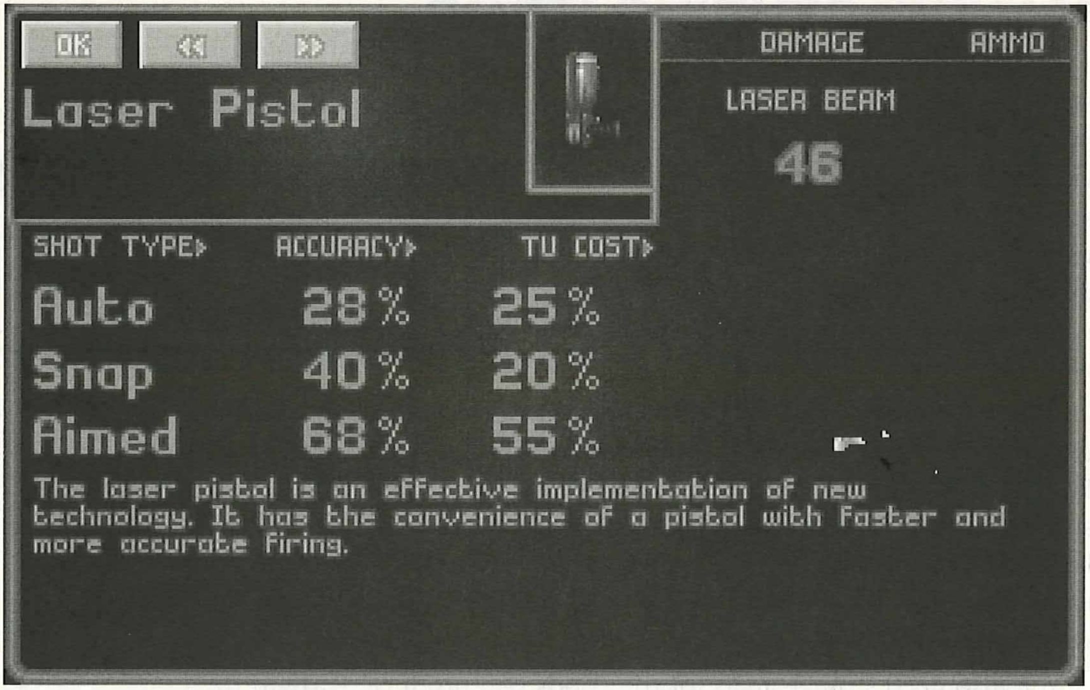
The Scientists Allocated window also appears if you click on an existing project in the Current Research window. You can add scientists to a project or pull them off in order to assign them to a different project. Especially in mid-game, when large numbers of items remain to be researched, managing your scientists in this manner is crucial.

COMPLETING A RESEARCH PROJECT

At the end of a research project, you'll be notified by the appearance of a Research Completed window.



Completing the research on an item is an extremely important event in the game, because it yields new opportunities for research or manufacture. Clicking on OK in the Research Completed window takes you back to the game, but you should always select the View Reports button in the window instead. Clicking View Reports yields the kind of screen shown in Figure 2.4. The information shown here is added to the UFOpaedia for access at any time.



Laser Pistol

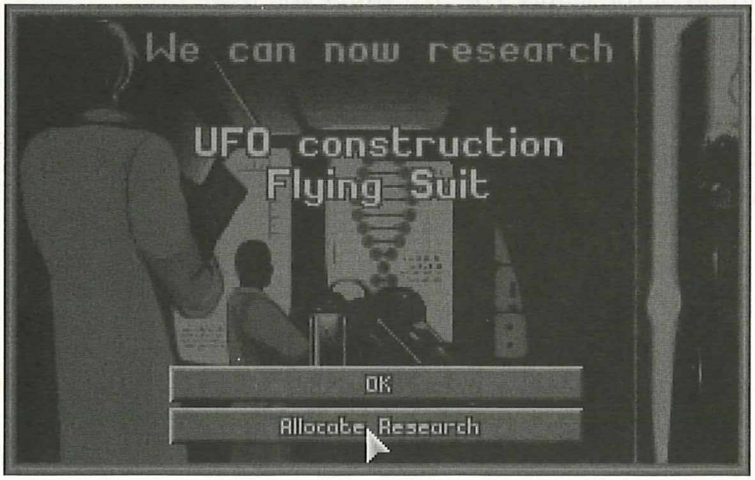
DAMAGE	AMMO
LASER BEAM 46	

SHOT TYPE▸	ACCURACY▸	TU COST▸
Auto	28%	25%
Snap	40%	20%
Aimed	68%	55%

The laser pistol is an effective implementation of new technology. It has the convenience of a pistol with faster and more accurate firing.

FIGURE 2.4 *Typical result of the View Reports feature*

Another important part of the View Reports procedure is the Reports screen, which appears automatically when you've completed looking at an information screen. From this screen, your scientists inform you of new research that is ready to be conducted. You can return to the game from this screen or you can click on Allocate Research to select a new project and allocate the now inactive scientists to it (always the recommended choice).


We can now research

UFO construction
Flying Suit

MANUFACTURING ITEMS

Manufacturing is a critical function in X-COM for two reasons. At the beginning of the game, you'll want to manufacture more powerful weapons than the measly little rifles and pistols you start with, and eventually you'll need armor for your soldiers as well. Later in the game, you need a full manufacturing industry in order to keep your cash flow alive, since funding from supporting nations won't be enough to get everything done.

TIP

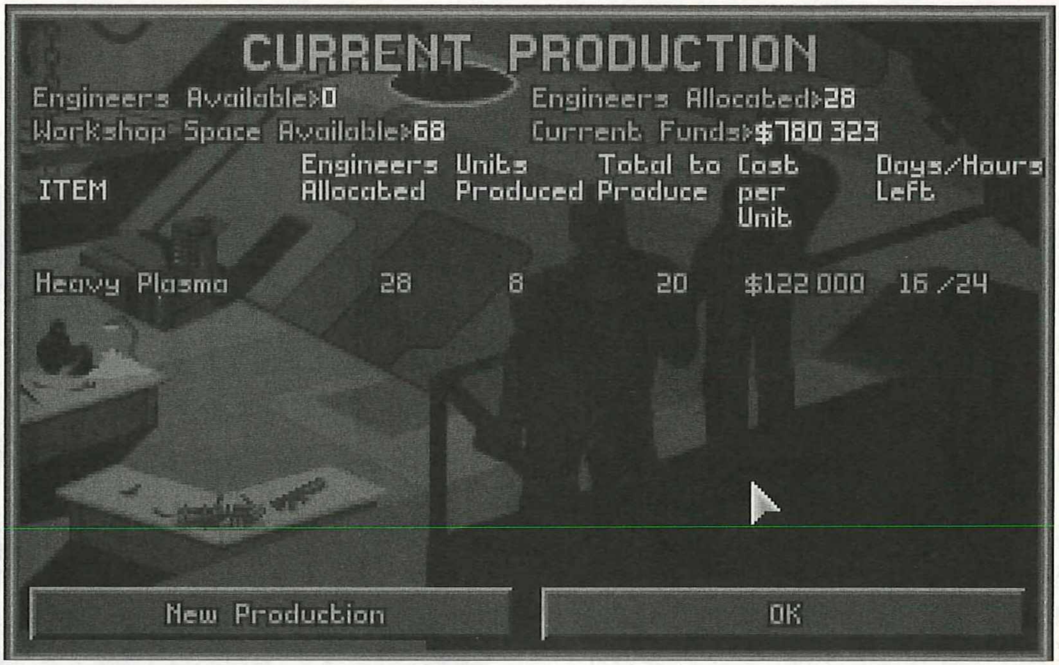
As with research, the trick is to start manufacturing early and never let your operations go idle.

To manufacture, you need engineers and workshop space. You hire engineers through the Purchase/Recruit procedure (see "Purchasing Equipment/Recruiting Personnel" earlier in this chapter), and you construct workshops by adding facilities (see "Building Facilities on Bases" later in this chapter). There's no point having workshop space without engineers to fill it, and even less point having engineers sitting around with no place to work.

You also need storage areas for the goods you produce. Early in the game, add a second General Stores facility (see "Building Facilities on Bases") to accommodate new items. Be sure to build General Stores on new bases as well.

Clicking on the Manufacture button on the Base Display takes you into the manufacturing portion of the game. The first thing you'll see is the Current Production window, as shown in Figure 2.5.

Start manufacturing early and never let up. In order to win at X-COM, you have to develop bigger and better weapons, bigger and better armor, and bigger and better aircraft. The measly weapons you start with won't be enough to beat back the aliens. Nor will the aircraft you get at the start of the game.



CURRENT PRODUCTION

Engineers Available>0
Engineers Allocated>28
Workshop Space Available>68
Current Funds>$780 323

ITEM	Engineers Allocated	Units Produced	Total to Produce	Cost per Unit	Days/Hours Left
Heavy Plasma	28	8	20	$122 000	16 /24

FIGURE 2.5 *The Current Production window showing the items currently being manufactured*

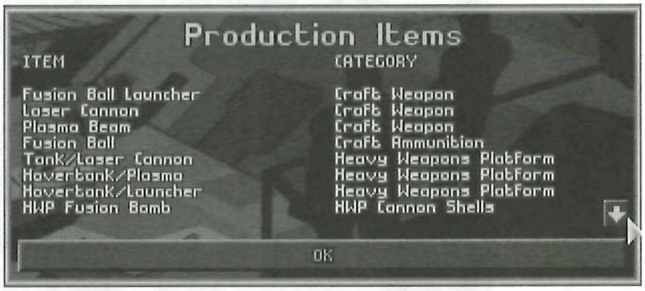
Here you see the items currently being manufactured, the number of engineers allocated to each job, the number of units already produced, and the total number of units scheduled for production. Also shown are the cost per unit and the number of days remaining to complete the job. The top of the window shows how many additional engineers are available for work, how much workshop space is currently unused, and the amount of money you have to work with.

You'll find yourself checking the Current Production window fairly often. Not only are the weapons and aircraft essential for defeating the aliens, they are necessary for X-COM's financial well being. Remember, you can sell these weapons as well as use them.

PRODUCING NEW ITEMS

To begin a manufacturing job, click the New Production button. This yields the Production Items window. The one shown here is from late in a game.

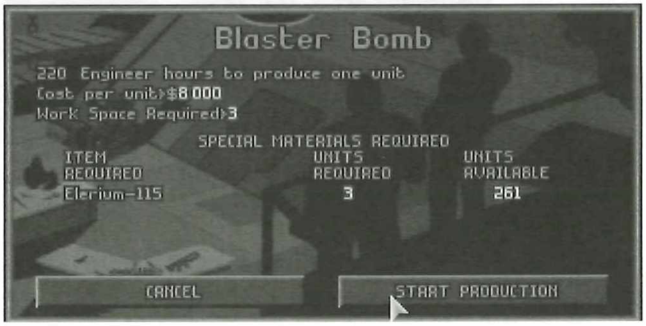
Earlier in your X-COM adventure, you'll have fewer items available for production than shown here. To add to the list, your scientists must research items as they come into the base; once the research is complete, and as long as the appropriate materials are available, your engineers can manufacture the researched items.



Production Items

ITEM	CATEGORY
Fusion Ball Launcher	Craft Weapon
Laser Cannon	Craft Weapon
Plasma Beam	Craft Weapon
Fusion Ball	Craft Ammunition
Tank/Laser Cannon	Heavy Weapons Platform
Hovertank/Plasma	Heavy Weapons Platform
Hovertank/Launcher	Heavy Weapons Platform
HWP Fusion Bomb	HWP Cannon Shells

To select an item for manufacture, click on it in this window. This brings up the Start Production window, which tells you how much each unit costs, how many "engineer hours" it takes to produce, and how much workshop space is needed to produce it. Once again, the example shown here is from late in a game.



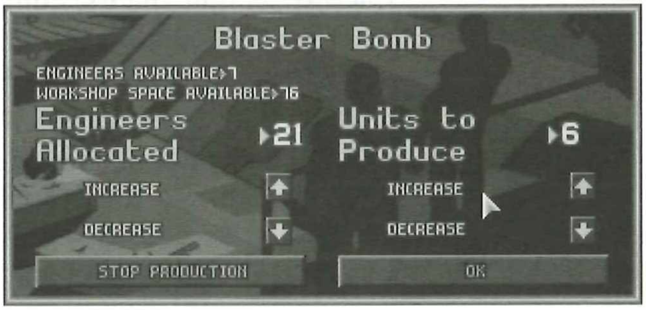
Blaster Bomb

220 Engineer hours to produce one unit
Cost per unit>$8 000
Work Space Required>3

SPECIAL MATERIALS REQUIRED

ITEM REQUIRED	UNITS REQUIRED	UNITS AVAILABLE
Elerium-115	3	261

The Engineer hours figure tells you how long it would take one engineer to complete the project. To find out how many hours it would take your entire staff to get it done, divide this figure by the number of engineers you'll allocate to the project.



Blaster Bomb

ENGINEERS AVAILABLE>7
WORKSHOP SPACE AVAILABLE>16
Engineers Allocated >21
Units to Produce >6

Clicking on the Start Production button takes you to the self-explanatory Engineer Allocation screen, in which you click on arrows to allocate or de-allocate engineers and to increase or decrease the number of units to be produced. Click on OK to begin the manufacturing process. When the items are ready, you'll see a Production Complete window pop up over the Geoscape. Note that some items take many days to finish.

CHANGING PRODUCTION PROJECTS

Once manufacturing is underway, you can change the number of engineers allocated to an item and the number of units to be produced. You do so by clicking on the Manufacture button on the Base Display, then on an item in the Current Production window (see Figure 2.5). This will bring up the Engineers Allocated window, in which you change the number of engineers, the number of units, or both. Or you can stop a project entirely by clicking the Stop Production button.

Project changes are necessary when you hire new engineers and you don't want them sitting around, or when an important manufacturing opportunity presents itself. Keep in mind that, in the case of a multiple-item project, some items are probably already produced.

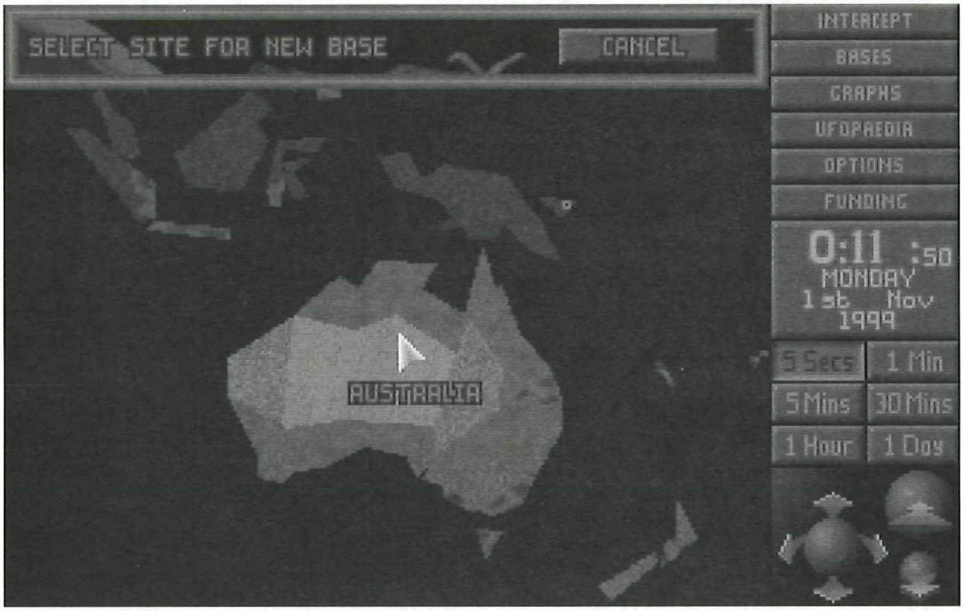
WHAT TO DO WITH MANUFACTURED ITEMS

You can either use the items you produce or you can sell them. Ships are placed in available hangars, and combat items are accessible through the Equip Craft feature (see "Equipping Your Aircraft" later in this chapter). Most manufactured items start off in General Stores, and in fact the Engineers Allocated screen won't let you produce items if you don't have room for them. To sell them, use the Selling Items/Sacking Personnel procedure discussed earlier in this chapter. Or you can transfer items to other bases, as explained later in "Transferring Stuff from Base to Base."

BUILDING NEW BASES

As soon as possible in X-COM, you want to establish a second base. Eventually, you'll need a third and a fourth, and at the Superhuman level you might very well need more. You can have a maximum of eight bases, and if you can afford them by all means go for it —they're invaluable.

To build a new base, click Build New Base, the top button on the Base Display. You'll be presented with the full Geoscape and a message telling you to select a site for the new base. Use the Globe Rotation icons to rotate the globe where you want to build the base, and then click. Here a base is being set up in the Australian outback:



SELECT SITE FOR NEW BASE

0:11 :50
MONDAY
1st Nov
1999

After you click the location on the globe, you'll get a window telling you how much the base will cost. You can cancel the whole procedure at this stage by selecting the Cancel button. If you click OK to go ahead, the money is spent, and a window opens in which you type the name of your base.

You're then shown an overhead view of an empty base and asked to place the access lift (remember, the base is underground). Click on the square where you want to locate the access lift. After placing it, your new base's name appears at the top-right of the Base Display. A new icon representing your base appears in the Base icon bar.

TIP

In general, it's good to place the access lift near where the center of the base will be, since you'll be using the lift to build new facilities.

BUILDING FACILITIES ON BASES

Your bases must grow along with your needs. The initial base offers enough to get started, but you'll want to build more facilities. New bases start with nothing, so adding facilities is the only way to make use of them. Construction is expensive, but it's extremely important.

NOTE

See Part Two, "Strategic Operations," for a discussion of the different facility types.

To add a facility to a base, click on the appropriate Base icon at the top-right of the Base Display. Then choose the Build Facilities button. The Installation window appears, as in Figure 2.6. From here you choose the type of facility you want.

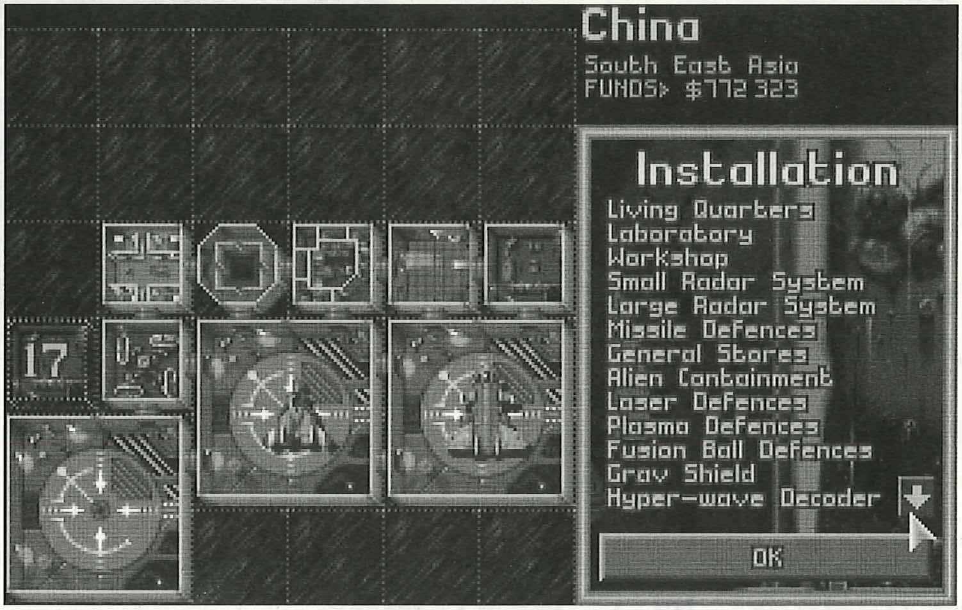
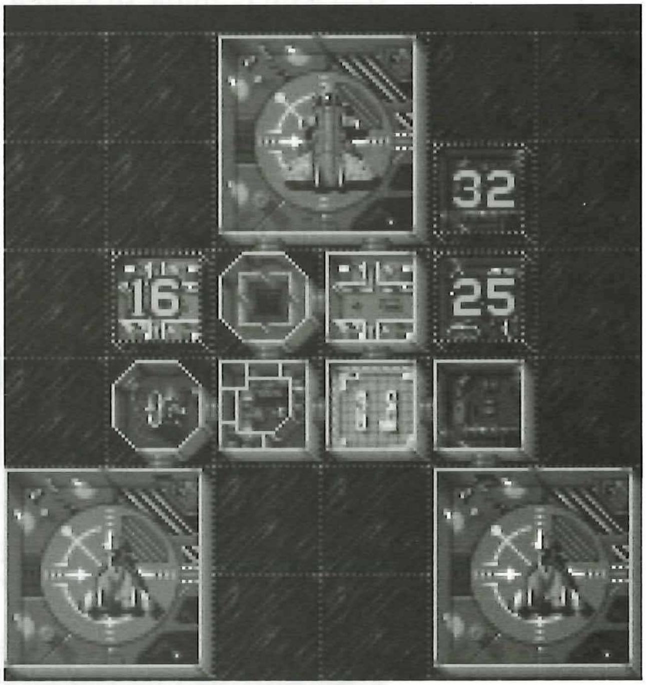

China
South East Asia
FUNDS▸ $772 323
17
Installation
Living Quarters
Laboratory
Workshop
Small Radar System
Large Radar System
Missile Defences
General Stores
Alien Containment
Laser Defences
Plasma Defences
Fusion Ball Defences
Grav Shield
Hyper-wave Decoder
OK

FIGURE 2.6 *The Installation menu, outlining the available facilities*

Clicking on a facility type will replace this window with another, telling you the building cost, the number of days it takes to build the facility, and how much it will cost to maintain each month. Generally speaking, if you know you need the thing, don't worry about time or maintenance costs. A facility will pay for itself in sheer usefulness. But if you're not sure you have a real use for a facility, watch the cost closely.

In the new window, your mouse cursor will have a square attached to it. Moving the mouse moves this square, which represents the new facility. To place the new facility on the base plot, move it adjacent to an existing facility and click. You *must* place a new facility up against one that's already in place; if there's no room, you can't build the facility.

The newly placed square will show the number of days remaining in its construction cycle. After this time has passed, you'll be informed that the facility is ready for use.

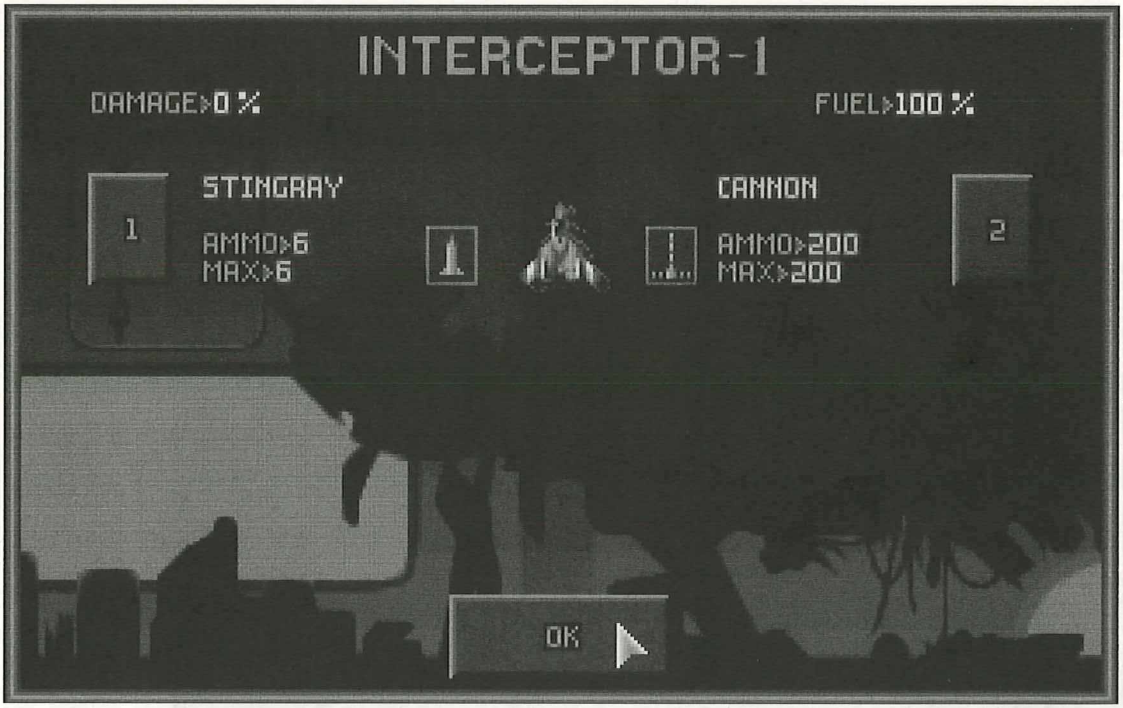


EQUIPPING YOUR AIRCRAFT

Ships receive orders from the Global Display, but they're equipped from the Base Display. To equip a ship, choose the Equip Craft button. You'll see a window displaying your available ships. Click on the ship you wish to equip.

EQUIPPING INTERCEPTORS

If you select an interceptor, you'll see the Equip Craft screen shown in Figure 2.7. It shows whether or not your ship is damaged and your ship's fuel level. More importantly, it shows the weapons the ship is carrying and the amount of ammunition on board.



INTERCEPTOR-1

DAMAGE>0 %

FUEL>100 %

STINGRAY

AMMO>6
MAX>6

CANNON

AMMO>200
MAX>200

FIGURE 2.7 *The Equip Craft screen for interceptors*

You access the weapons by clicking on the large numbered Weapons buttons on the far left and far right sides of the screen. Doing so yields the Select Armament screen, where you can add a weapon or replace an existing weapon with a better one (or at least one for which you have ammunition). Also in this window is a figure showing the amount of ammunition available for each weapon type.

Be sure to select weapons for which you have ammunition. If you need new weapons or ammunition, you can buy them using the Purchase/Recruit procedure explained earlier in the chapter. Later in the game you'll be able to manufacture new types of weapons, many of which are crucial to your survival.

NOTE

See Part Two, "Strategic Operations," for a look at the different weapons.

EQUIPPING TROOP TRANSPORTS

Equipping troop transports is much more involved than equipping interceptors. Initially, your only available troop transport is the Skyranger, whose Equip Craft screen is shown in Figure 2.8.

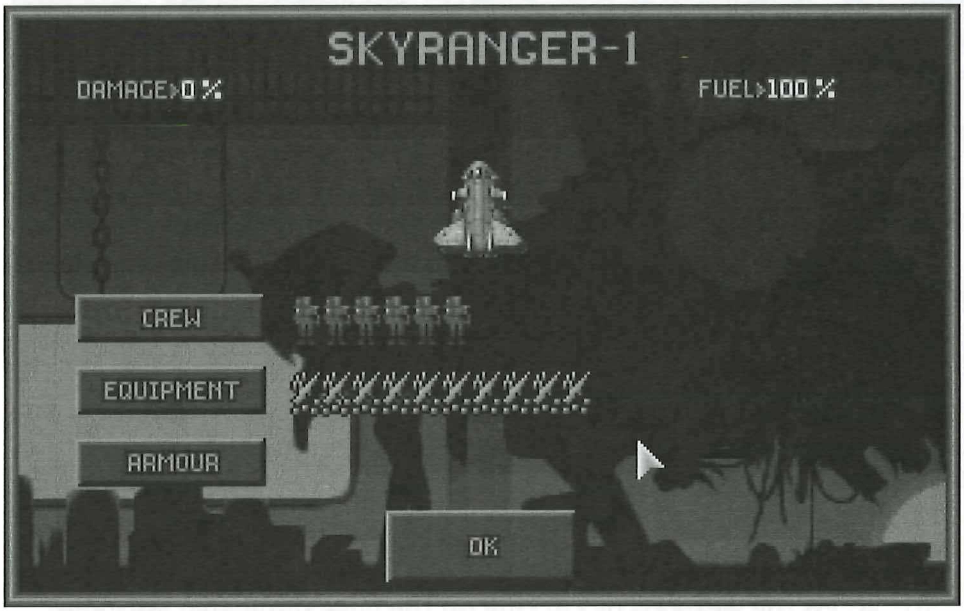
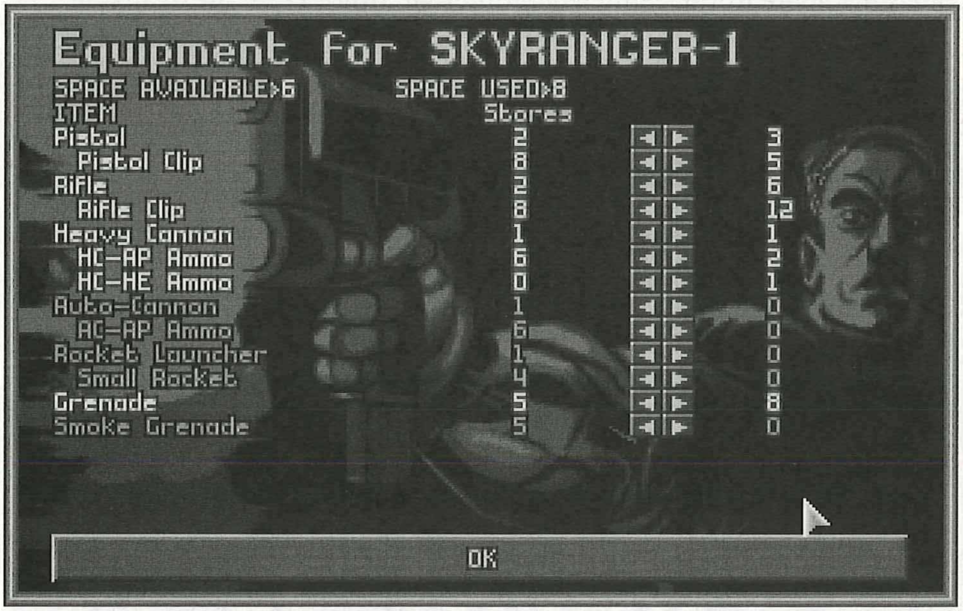


FIGURE 2.8 *The Equip Craft screen for troop transports*

Note the lack of Weapons buttons. Skyranger can't carry weapons. Its only function is to transport troops and their equipment into ground combat. Techniques and tips for equipping this ship are covered in Part Three, "Tactical Operations." For now, we'll look only at the basics of *how* to equip a Skyranger.

Selecting the Crew button brings up the Select Squad screen. From here you choose which soldiers you want to station on the Skyranger. The screen gives the name and rank of the soldiers, as well as the crafts to which they're currently assigned. Click on a soldier to change his or her assignment.

Soldiers need equipment, and that's the purpose of the Equipment button. Clicking this button takes you into the Select Equipment screen, shown in Figure 2.9. From here you can add weapons to the Skyranger by clicking a right arrow, or remove them from the ship into General Stores by clicking a left arrow. The Skyranger has limited space, as noted by the "Space Available" and "Space Used" figures at the top of the screen. When a Skyranger is loaded to capacity, the game will let you know.



Equipment For SKYRANGER-1

SPACE AVAILABLE>6 SPACE USED>8

ITEM	Stores		
Pistol	2	◄ ►	3
Pistol Clip	8	◄ ►	5
Rifle	2	◄ ►	6
Rifle Clip	8	◄ ►	12
Heavy Cannon	1	◄ ►	1
HC-AP Ammo	6	◄ ►	2
HC-HE Ammo	0	◄ ►	1
Auto-Cannon	1	◄ ►	0
AC-AP Ammo	6	◄ ►	0
Rocket Launcher	1	◄ ►	0
Small Rocket	4	◄ ►	0
Grenade	5	◄ ►	8
Smoke Grenade	5	◄ ►	0

FIGURE 2.9 *The Select Equipment screen for troop transports*

Note how the items are grouped. Pistol Clip is as subordinate to Pistol, and two types of cannon shell show up under Heavy Cannon. Pay attention to these groupings, because weapons are useless without the proper ammunition. Don't even bother loading a cannon unless you plan to take ammo to support it.

The Armour button on the Equip Craft screen (see Figure 2.8) lets you outfit your soldiers with body armor (X-COM was developed in England, which accounts for "armour" and other British spellings in the game). Initially your soldiers don't have any armor, but it's wise to research and manufacture armor as soon as possible (armor stops bullets much better than skin does). When you click the Armour button, the Select Armour screen appears, as in Figure 2.10. This screen allows you to assign a particular kind of armor to a particular soldier. The screen in Figure 2.10 comes from late in the game when different armor types are available.

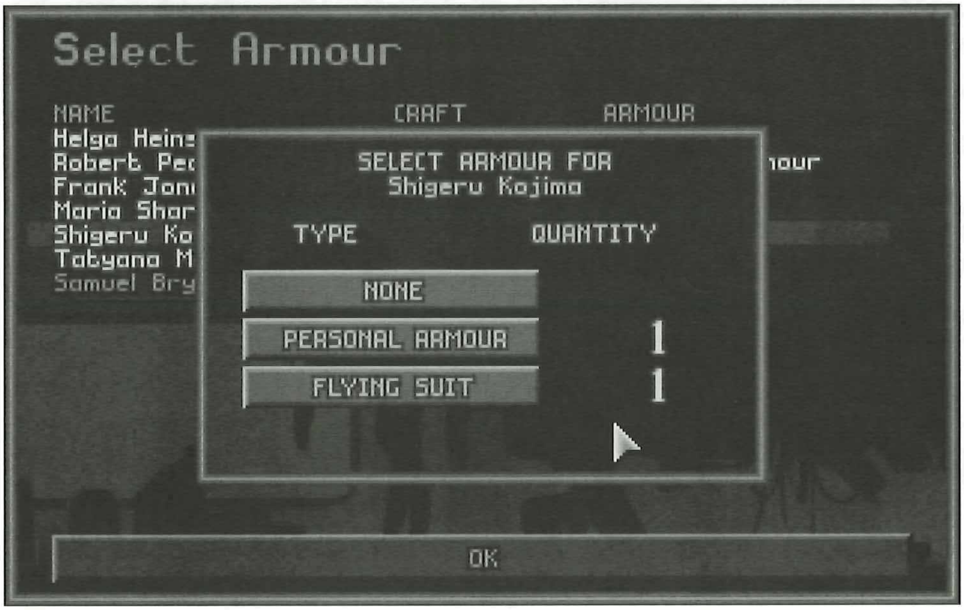

Select Armour
NAME
CRAFT
ARMOUR
Helga Heins
Robert Pec
Frank Joni
Maria Shar
Shigeru Ko
Tabyana M
Samuel Bry
nour
SELECT ARMOUR FOR
Shigeru Kojima
TYPE
QUANTITY
NONE
PERSONAL ARMOUR
1
FLYING SUIT
1
OK

FIGURE 2.10 *The Select Armour Screen from late in the game*

TRANSFERRING STUFF FROM BASE TO BASE

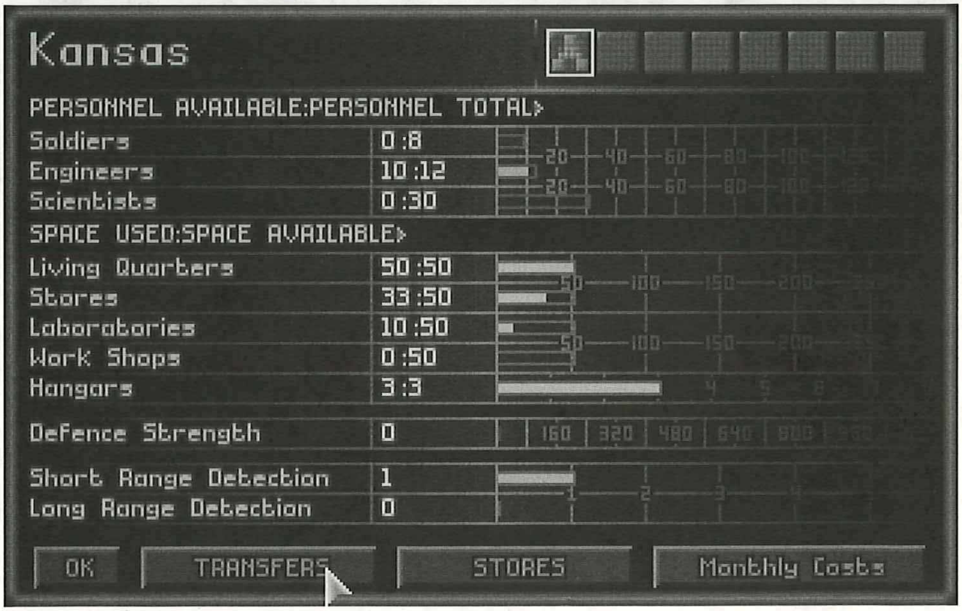
As the number of bases increases, you'll need to transfer equipment, materials, and people from one base to another. This is handled by selecting the Transfer button on the Base Display. You'll be asked for the destination base, then be presented with the self-explanatory Transfer window. Select the items or personnel you wish to transfer, then click on the Transfer button. You'll be told the cost of the transfer (usually negligible) and asked to confirm it.

GETTING BASE INFORMATION

Details about the currently selected base are available by clicking on the Base Information button on the Base Display. Doing so yields the type of information screen shown in Figure 2.11. Appendix A covers the basics of reading these details. For now, what matters is that you can switch from base to base by using the Base icon bar in the upper-right corner of the screen. Using the buttons at the bottom of the screen, you can examine information about transfers and stores at that base whose icon you selected.

TIP

The Transfer button is especially useful if you've purchased items or hired personnel, and you want to find out when they'll arrive.



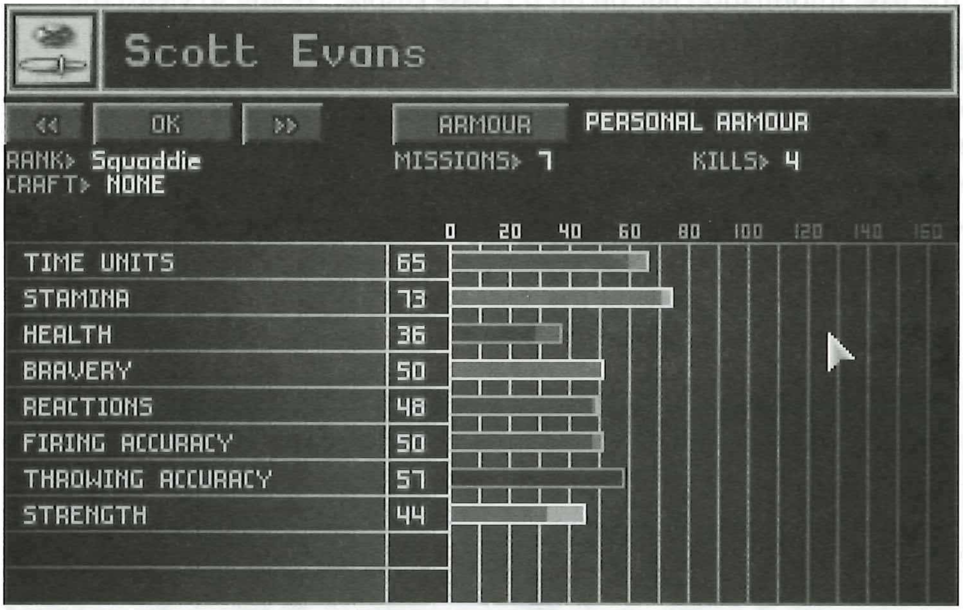
Kansas

PERSONNEL AVAILABLE:PERSONNEL TOTAL	
Soldiers	0:8
Engineers	10:12
Scientists	0:30
SPACE USED:SPACE AVAILABLE	
Living Quarters	50:50
Stores	33:50
Laboratories	10:50
Work Shops	0:50
Hangars	3:3
Defence Strength	0
Short Range Detection	1
Long Range Detection	0

FIGURE 2.11 *The Base Information window*

GETTING SOLDIER INFORMATION

Selecting the Soldiers button on the Base Display opens the Soldiers window shown in Figure 2.12. This window offers details about each soldier at the base. It is particularly useful when assembling or changing a combat squad. Determining which soldiers to select for a combat mission is covered in Part Three, "Tactical Operations."



Scott Evans

PERSONAL ARMOUR

RANK> Squaddie

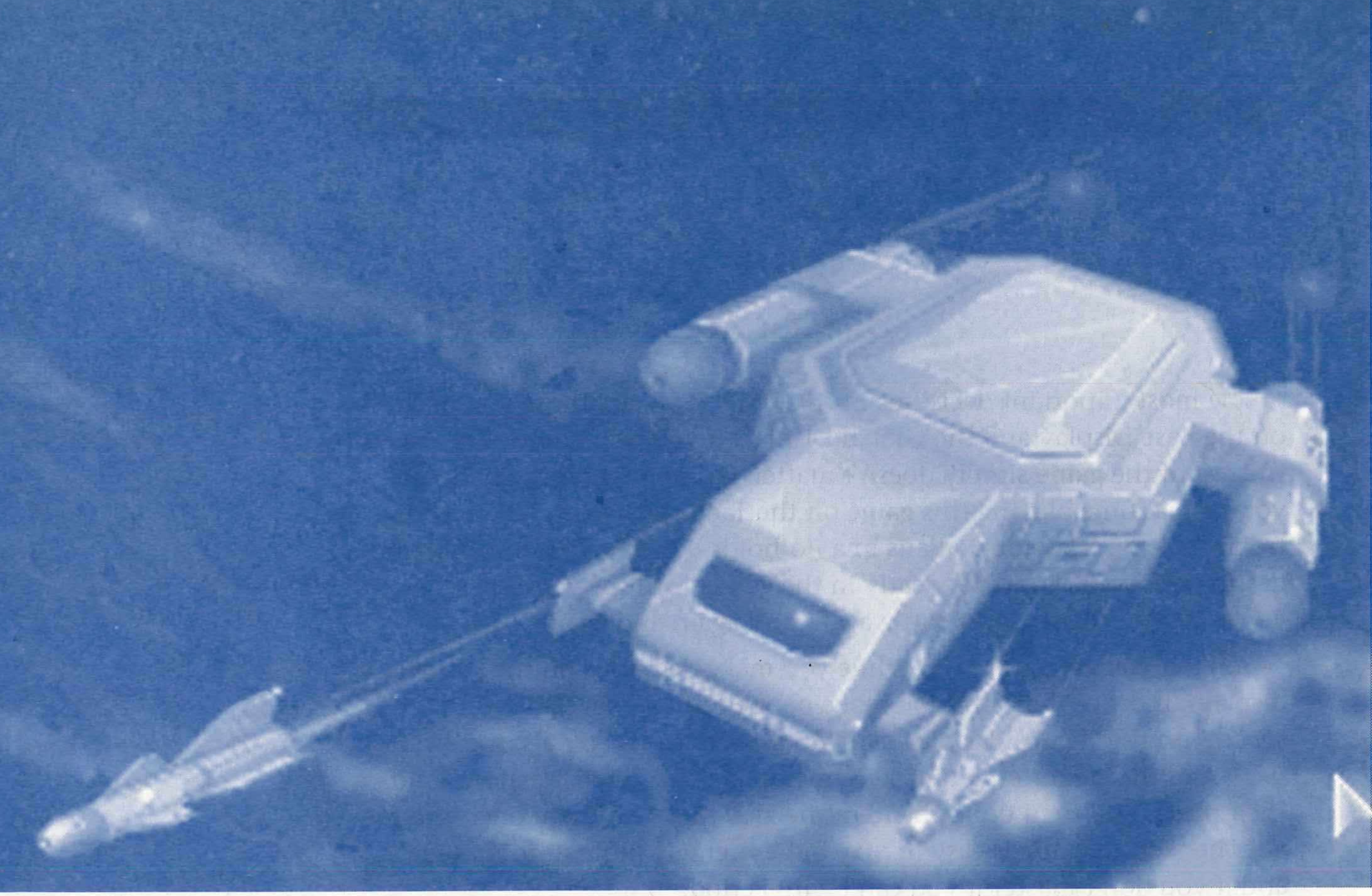
CRAFT> NONE

MISSIONS> 7

KILLS> 4

TIME UNITS	65
STAMINA	73
HEALTH	36
BRAVERY	50
REACTIONS	48
FIRING ACCURACY	50
THROWING ACCURACY	57
STRENGTH	44

FIGURE 2.12 *The Soldier Information window*



CHAPTER THREE

COMBAT ON THE TACTICAL DISPLAY

THREE

The most important decisions in X-COM, by far, are those you make on the Base Display and the Global Display. If you don't do well there, the rest of the game simply doesn't matter. But you spend the bulk of your actual time playing this game on the Tactical Display, where your troops take on individual aliens in a no-holds-barred series of search-and-destroy missions. From very early in the game until the very last scene, you send your troops into battle again and again and again.

You'd better get good at it. While you make decisions on the strategic displays, most of the gains you make happen in combat. Only through success on the Tactical Display can you acquire the materials, the artifacts, and the creatures you need to research aliens, their weapons, and their plans, and then build the items needed to defeat them once and for all. The tactical game is easy to play but extremely difficult to master, and if you don't master it you can't win. Period.

Battles take time. But they make this game truly outstanding. Don't look at them as stages you have to go through to get to the next part of the game. Instead, think of each battle as a game in itself, because in essence that's what each battle is. Pay attention to which soldier is doing what, start to cheer for soldiers and to specialize their assignments, and soon tactical battles will be something you look forward to for their own sake.

ENTERING AND LEAVING THE TACTICAL DISPLAY

You enter the Tactical Display automatically when you initiate combat. Combat is initiated when an alien ship invades one of your bases or when you intercept one of the following with a troop transport ship (usually a Skyranger):

- An alien crash site
- An alien landing site
- An alien terror site
- An alien base

You leave the Tactical Display and return to the Global Display when you win or lose a battle.

The preferred way, of course, is to win the battle and put all the aliens out of commission. This means killing and/or stunning them. As soon as you accomplish this feat and click on the End Turn button, the battle ends and the Debriefing screen appears to tell you how well you did. You're taken immediately back to the Global Display, and your troop ship starts returning to base.

You also leave the Tactical Display when you lose a battle. You lose when you either abort the mission or have all your soldiers wiped out. To abort a mission, you click on the Abort icon. Whether you lose a battle when your squad is wiped out or you abort the mission, you're presented with the Debriefing screen (not a very complimentary one) and returned to the Global Display.

EQUIPPING SOLDIERS FOR BATTLE

There are two parts to giving your squad the appropriate equipment. The first takes place in the Base Display, where you load equipment on your ships. The second part, which involves equipping your soldiers, takes place as soon as your troop interception mission begins.

WARNING

Once a troop ship leaves base, it cannot be resupplied with weapons.

Before sending out ships on an interception mission, make sure you've supplied them with the proper equipment. How to do this is explained in "Equipping Your Craft" in Chapter 2 and, in much more detail, in Chapter 7. On base, you select the soldiers you will take into battle, provide them with weapons and other equipment, and give them armor when it's available.

Once combat is initiated, X-COM loads the Tactical Display and immediately shows you the Equip Squad screen. It is shown in Figure 3.1. From here you assign weapons and devices to each soldier. The important thing is to take all the weapons you think you'll need for combat. If you don't, you'll have to return to the troop ship and replenish your weapons.

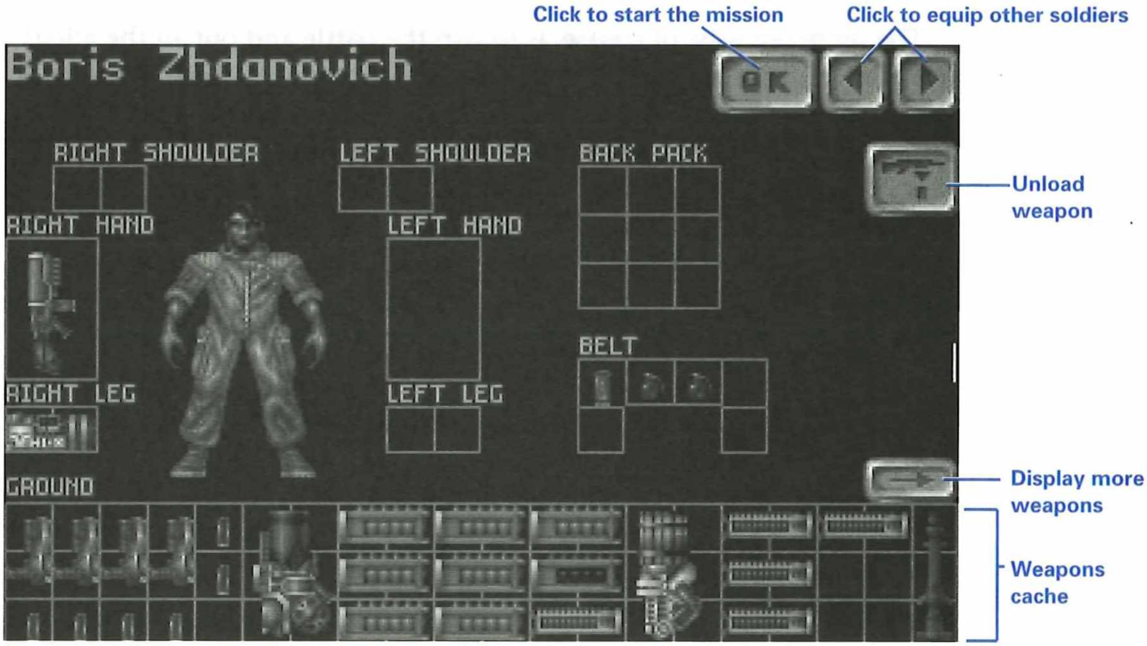

Click to start the mission
Click to equip other soldiers
Unload weapon
Display more weapons
Weapons cache
Boris Zhdanovich
OK
RIGHT SHOULDER
LEFT SHOULDER
BACK PACK
RIGHT HAND
LEFT HAND
BELT
RIGHT LEG
LEFT LEG
GROUND

FIGURE 3.1 *The Equip Squad screen, which is displayed at the beginning of each ground mission*

Each soldier has an Equip Squad display. To move from one display to the next, click one of the arrows at the top-right of the Equip Squad screen. You can move from soldier to soldier by clicking these arrows. Click OK when you're ready to start the mission proper.

Each soldier is represented by a picture and a series of "locations"—right hand, back pack, etc. Each location represents a body area or a

piece of equipment on the soldier where weapons can be carried. The idea is to move weapons from the weapons "cache" at the bottom of the screen into the locations.

To assign a weapon to a soldier, click on a weapon in the cache and drag it (by moving the mouse) to the appropriate location. Some locations can hold more than one weapon. A soldier can carry more small weapons than large ones.

Only one weapon of any size can be held in each hand, but the backpack can hold up to nine (notice the nine boxes). Some weapons occupy more than one box in the backpack, the belt, and the other locations with more than one box. You'll have to do some arranging to fit weapons in certain locations.

HOW MUCH WEAPONRY SHOULD SOLDIERS CARRY?

The more weapons your soldiers carry, the more encumbered they become. Soldiers who carry a lot of weapons use up energy faster, which means they can do less. On the other hand, an under-equipped soldier is in constant danger of being killed and might not be of any use.

YOUR TURN, MY TURN

X-COM's tactical game takes place in turns. You go first, then the computer moves the aliens. After you've moved all the soldiers you intend to move, you click on the End Turn button to start the aliens' turn. This sequence continues until either the aliens or your troops are defeated, or you abort the mission.

During your turn, you may move soldiers, fire their weapons, use specific items, pick up or drop items, or do any combination of these actions. The aliens, on the other hand, can only shoot at your soldiers as they come into view, an action called "opportunity fire." Similarly, the only action your soldiers can perform during the aliens' turn is opportunity fire, as long as you've set them up to do so.

ONE TURN = FIVE SECONDS

If you've played war games before, either on computer or on paper maps with cardboard playing pieces, playing in turns is easy. However, playing in turns can be extremely confusing, and seemingly illogical, if you've never played a war game by turns before. Keep one thing in mind at all times: Each turn represents roughly five seconds of action, just as five seconds is the standard time passage on the Global Display. In those five seconds, your soldiers can do only a limited amount, as can the aliens in their five-second turns.

WHAT ARE TIME UNITS?

Understanding *time units* is extremely important. Each soldier begins a turn with a specific number of time units called TUs, and every action the soldier performs consumes time units. Some soldiers have more TUs than others, and wounds and a host of other factors affect the number of TUs a soldier has. For example, firing an aimed shot takes more time units than firing a snap shot, and picking up items from the ground takes more time units than turning a soldier in a different direction.

Early in the game, you'll find yourself using up time units almost uncontrollably, but midway through you'll know instinctively how to manage them. One of the most important things to keep in mind is this: It's no crime if your soldiers use only a small percentage of their time units. Don't think that soldiers have to max out on their time units each turn. Often a slow advance is required, or simply a resting period to organize weapons and plans.

TIP

It's okay if your soldiers only use a fraction of their time units. Don't waste TUs indiscriminately.

Preserving time units is especially important for opportunity fire (covered later in this chapter). If you don't preserve enough time units, your soldiers won't be able to react during the aliens' turn.

EXPLORING THE BATTLESCAPE

The Battlescape is the display on which you fight battles. Figure 3.2 shows a typical view of a Battlescape, with soldiers visible on a realistic-looking landscape. The battle area itself is much larger than what's shown here. To see the rest of this Battlescape, you would move the mouse to the far right, left, top, or bottom of the window. By doing this you can scroll across the entire area in all directions until you reach the borders. These borders are the "edge of the world." You can't go beyond them, and neither can the aliens.

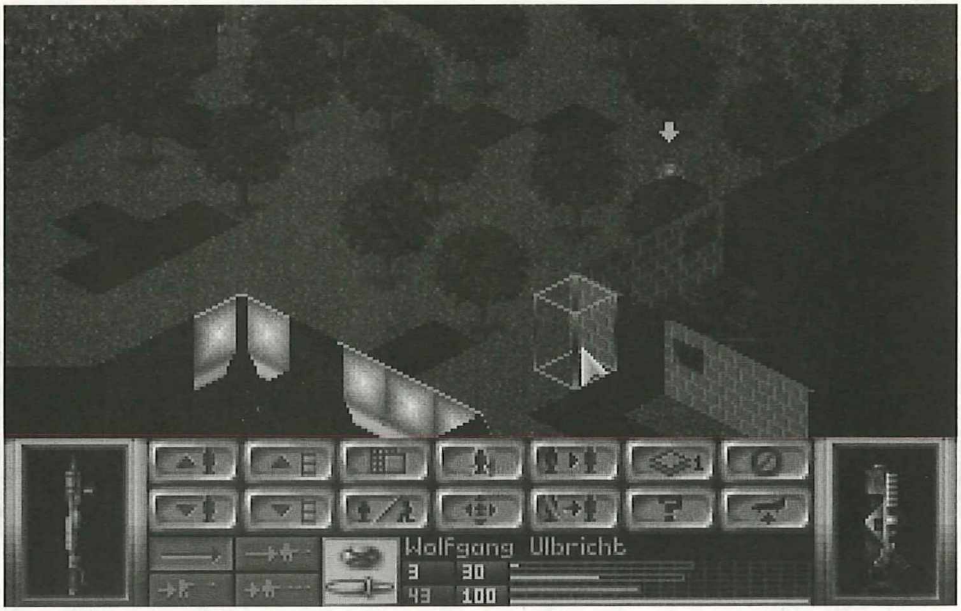


FIGURE 3.2 *A typical Battlescape, with soldiers, buildings, and a UFO outline*

In the course of a battle you move soldiers across and around the Battlescape, firing or throwing weapons or items as you encounter alien beings. These beings are usually soldiers, but they can also be navigators, engineers, leaders, medics, and commanders. For the most part you'll destroy them, but you should capture as many as you can. Early in the game, capturing isn't really an option, because your soldiers are too easily killed in the attempt.

The Battlescape shows trees, fields, buildings, fences, hedges, hills, and various other features and land forms. You can climb over them, hide behind them, enter them—more or less whatever you could do in a real battle. You can shoot through fences and walls to knock them down, and move through doors as you approach them.

At the bottom of the Battlescape is the control bar, which you use to conduct the battle. Features on the control bar are discussed throughout this chapter. Figure 3.3 shows the control bar with each control labeled. If you ever need to know what these controls are, look on the very first page of this book, which also shows the Battlescape control bar.

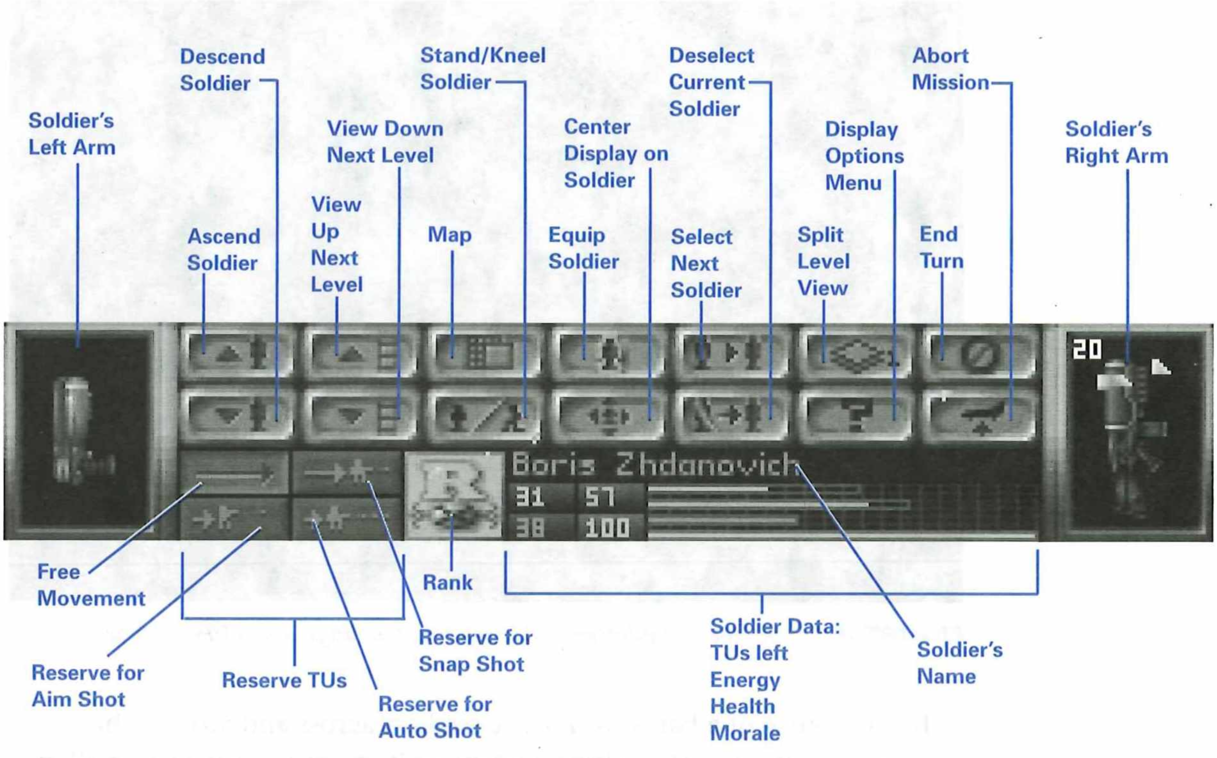

Descend Soldier
Stand/Kneel Soldier
Deselect Current Soldier
Abort Mission
Soldier's Left Arm
View Down Next Level
Center Display on Soldier
Display Options Menu
Soldier's Right Arm
View Up Next Level
Ascend Soldier
Map
Equip Soldier
Select Next Soldier
Split Level View
End Turn
20
Boris Zhdanovich
31
57
38
100
Free Movement
Rank
Reserve for Aim Shot
Reserve TUs
Reserve for Snap Shot
Reserve for Auto Shot
Soldier Data: TUs left Energy Health Morale
Soldier's Name

FIGURE 3.3 *The Battlescape control bar*

DETERMINING WHAT YOU SEE

How much of the whole battle area you can see depends entirely on your soldiers. As they make their way through the battleground, more of it becomes visible and known. Visible areas are in your soldiers' "line of sight"; the rest of the battleground isn't. To see more of the battleground, you can turn soldiers around as far as 360 degrees from where they stand, or you can simply move soldiers to new locations. In night battles, areas come into view and disappear again as your soldiers enter and leave them.

DIFFERENT LEVELS IN THE BATTLESCAPE

There is more than one level to the Battlescape. Sometimes, there are three or more. Buildings can have two or three stories, and some open onto a roof. To see the different levels, press the View Next Level buttons on the Battlescape control bar. These buttons have an up- and down-ladder on them (see Figure 3.3). Figure 3.4 shows the second level of a Battlescape, with the roof of the Skyranger and the surrounding territory.

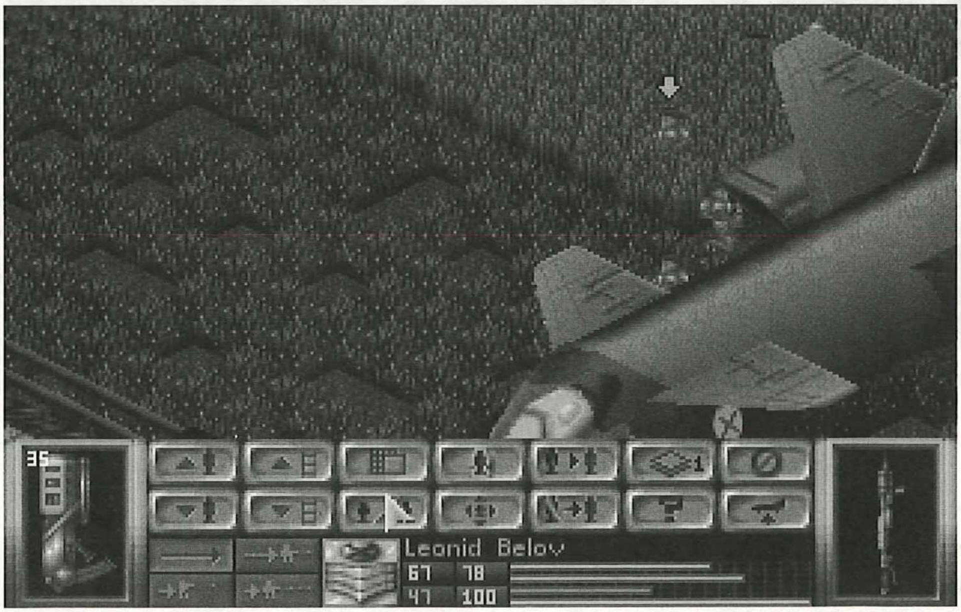


FIGURE 3.4 *The second level of a Battlescape, looking down at the Skyranger*

You can view the levels one by one, or all at the same time. Viewing all the levels at once is much less useful in actual play, but to do it you click the Split Level View button (second from right, top row). Click it again to return to the split view.

SEEING THE OVERHEAD MAP

The Battlescape window shows only a small portion of the battleground. To see a map of the entire battleground, click on the Map button (third from left, top row). Figure 3.5 shows the results of doing so.

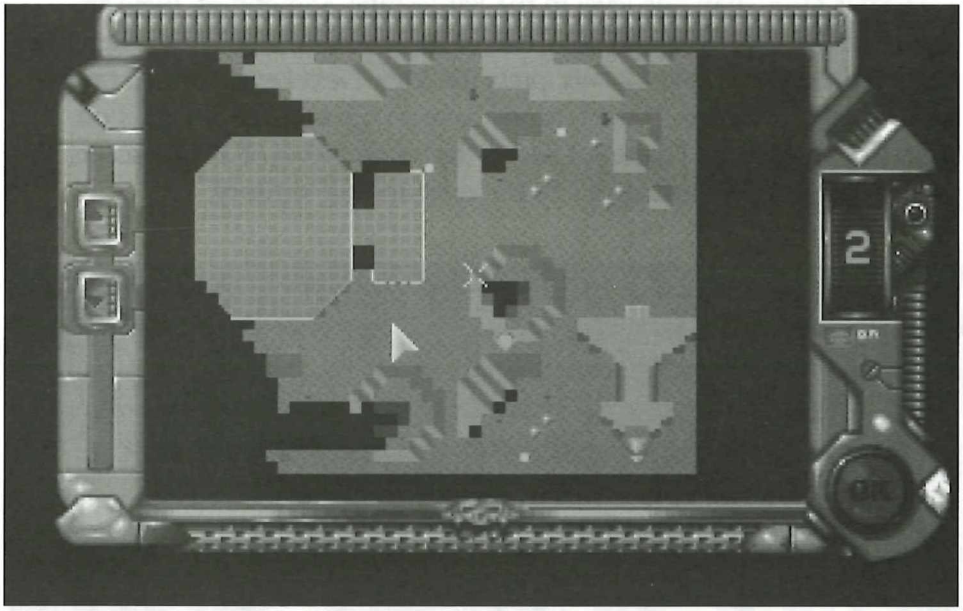


FIGURE 3.5 *A map of an entire battleground*

The dark regions are areas that have yet to come into our soldiers' view. To see more areas, click near the borders of the screen. Clicking is similar to scrolling the map, and when you click on a spot the map will be centered there. To see other levels, click on the arrows to the left of the map. The current level is shown in the small icon on the right.

On the overhead map, you can see the outline of both your ship and the alien craft (once you've spotted it). Also visible are the following indicators:

Indicator	**What It Is**
Yellow dot	A soldier
Red dot	A civilian (terror sites only)
Blue dot	An alien
White cross	A dead soldier, alien, or civilian, as well as weapons and artifacts dropped by aliens

To exit the map, click the right mouse button or click on OK with the left mouse button.

DON'T WASTE TIME WITH WHITE CROSSES!

One confusing aspect of the map display is that weapons and artifacts dropped by aliens, as well as dead soldiers, dead aliens, and dead civilians, are represented by white crosses (a different color would have been nice). Don't waste time backtracking only to find items you neither want nor need.

SENDING SOLDIERS TO BATTLE

On the Battlescape, you move your soldiers one at a time. When each turn begins, one soldier is selected, but you don't have to complete this soldier's turn (and expend all the time units) before moving another soldier. You can switch back and forth at will, making sure all soldiers are exactly where you want them to be before ending the turn.

SELECTING NEW SOLDIERS TO FIGHT WITH

There are two ways to switch from one soldier to another, by clicking the Select Next Soldier button or by selecting the soldier with the cursor.

Clicking on the Select Next Soldier button on the Battlescape control bar (third from right, top row) takes you to another soldier, but not necessarily to the one you want. If you keep clicking on the button you'll eventually get there, but this method can be quite cumbersome. Clicking the button is, however, an extremely useful procedure when your soldiers are widely scattered. Without the Select Next Soldier button, you would have to scroll the Battlescape, or fire up the overhead map, in order to find the rest of the squad.

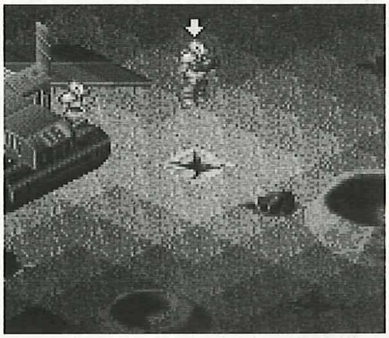
The second means of selecting another soldier is easier to do than it is to explain. Move the mouse on the screen, scrolling the Battlescape if need be, until the rectangular "cursor" is on the soldier you want to select. *The cursor will flash if it is on the soldier,* and this is important. If you click when it's flashing, that soldier will be selected.

But be careful, because if it looks like the rectangular cursor is on the soldier, but it's not flashing, clicking won't select that soldier. Instead, the currently selected soldier will move to the location of the cursor. This can be immensely frustrating.

Also, *make absolutely certain* that you're not moving the "target" cursor, an empty red rectangle (or two or three rectangles if you're on the second or third level). Clicking the target cursor instead of the rectangular flashing cursor tells your currently selected soldier to fire at the soldier you just clicked on. Not a pretty sight, and rarely what you intended.

To make sure you don't move the wrong soldier or fire a weapon, click the Deselect Current Soldier button on the control bar (immediately below Select Next Soldier). This gives you the rectangle only, with no soldier "attached" to it. On the other hand, clicking the Deselect Current Soldier button takes a few extra seconds, and I guarantee you won't bother with it most of the time. But it's good to keep in mind, and good to get in the habit of using.

One other thing about selecting soldiers. Tanks and hovercraft, which you can bring to the battleground with you, are larger than soldiers. As a result, clicking on a tank or hovercraft yields a four-rectangle cursor (2-by-2). On screen, this square looks like a diamond. To select another soldier when a tank is currently selected, position the top-most square on the soldier, and then click. Clicking any other square will do nothing.



If you're having trouble telling which soldier is selected, click the Center Display on Soldier icon (see Figure 3.3). The display will shift so that the soldier you selected is in the middle of the Battlescape.

SOLDIER DATA

Figure 3.6 shows a soldier selected and ready for action at the beginning of a turn. At the bottom of the control bar is the soldier's name and four pieces of data. The data are displayed in both numbers and bars.

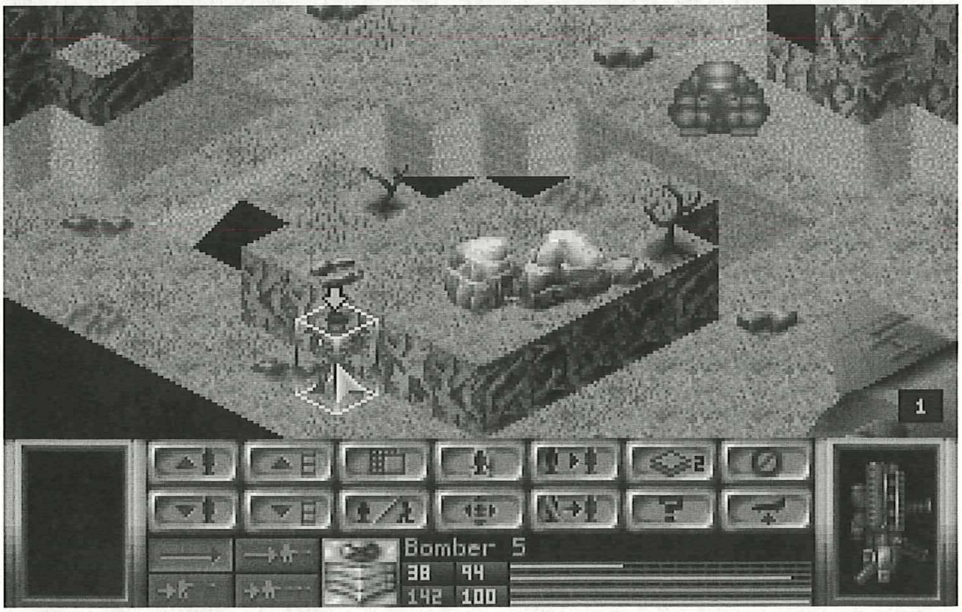


FIGURE 3.6 *Soldier selected, with data displayed on control bar*

TUs, Energy Level, Health, Morale

Both the top bar and the number in the upper-left number corner (both green) show the number of time units available to the soldier. The second bar and the number in the upper-right corner (orange) show the soldier's energy level. The third bar and the number in the lower-left corner (red) show the soldier's health. The fourth bar and lower-right number (purple) show the soldier's morale level. All these characteristics come into play during combat.

The number of time units remaining guides all the soldier's actions. Whenever a soldier does anything at all, even as small an action as kneeling down or turning to the left, time units are used up. Keep very close watch on this number.

Soldiers might have TUs remaining, but if their energy level depletes they still won't be able to do anything. All a soldier's actions consume energy, and when a soldier performs actions that in real life would be energy-draining—actions such as climbing, carrying, walking through difficult terrain, and so on—a lot of energy is consumed.

When soldiers get hit by enemy fire, their health declines. Be careful with this one: If health is extremely low, take the soldier slowly back to the troop ship, or use a Medi-Kit for treatment (see Part Three to learn how to do this).

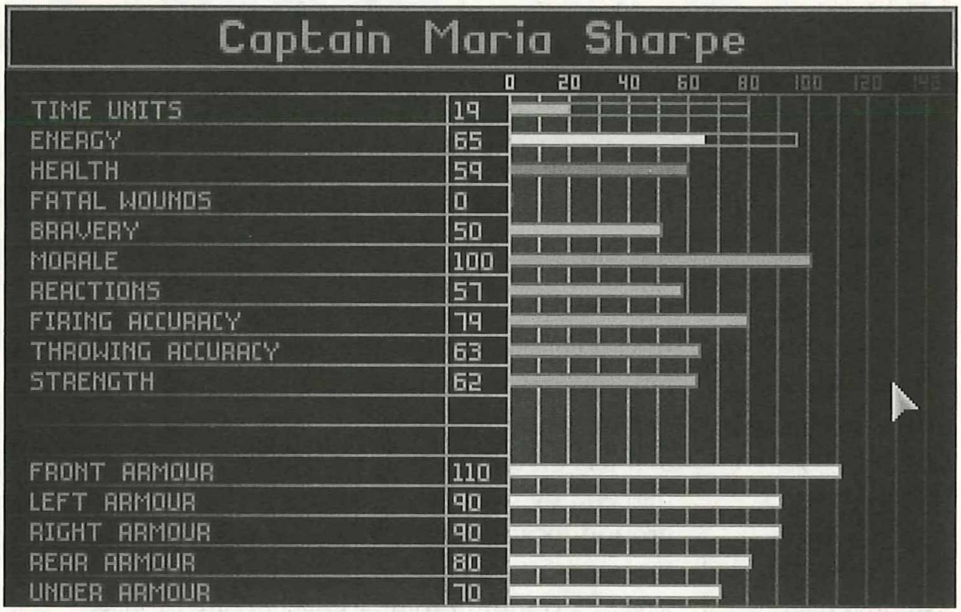
Morale matters a great deal. If a soldier is wounded, if other members of the squad are killed, or if a high-ranking officer gets killed, the soldier's morale decreases. Soldiers whose morale drops below the 50-percent level are in danger, each turn, of panicking. Morale increases whenever a soldier kills or stuns an alien. Having higher-ranking soldiers accompany the mission boosts morale (the higher the better), unless they get killed.

WHEN PANIC STRIKES!

Panic, always a danger when morale drops below 50 percent, has several possible effects. In the best-case scenario, soldiers freeze in place and lose all their time units. Next down the list comes throwing down weapons and running away. In the worst case, soldiers go berserk (a window will tell you this) and fire at random. Definitely not nice.

Other Soldier Data

Time units, energy, health, and morale aren't the only statistics that guide a soldier's behavior. By clicking on the Soldier Data area of the Battlescape control bar, you can get an entire panoply of information, all of which is relevant to battle. Figure 3.7 shows a sample Soldier Data display.



Captain Maria Sharpe

TIME UNITS	19
ENERGY	65
HEALTH	59
FATAL WOUNDS	0
BRAVERY	50
MORALE	100
REACTIONS	57
FIRING ACCURACY	79
THROWING ACCURACY	63
STRENGTH	62
FRONT ARMOUR	110
LEFT ARMOUR	90
RIGHT ARMOUR	90
REAR ARMOUR	80
UNDER ARMOUR	70

FIGURE 3.7 *Complete soldier data. You can see this by clicking the Soldier Data Area of the Battlescape control bar.*

The four primary attributes are here, but several more are visible as well. Bravery affects the chance of morale decreasing, while Reaction determines whether the soldier automatically engages in opportunity fire. Strength is important for energy, and Firing and Throwing Accuracy determine the soldier's chance of hitting a target. The Psionic Skill level is shown only on soldiers who have undergone Psionic Training (explained in Part Three). Also noted on this screen are the soldier's wounds.

TIP

A soldier's attributes can improve with experience. See Part Three for details.

MOVING SOLDIERS

To move a soldier you've selected, move the rectangular cursor to a new square and click. The soldier will walk in that direction until all his or her time units are used up or an alien comes into view (that is, an alien comes into the soldier's line of sight). At that point, the soldier will stop and await further instructions.

The Battlescape control bar offers other buttons for moving soldiers (Figure 3.3 shows where these buttons are):

Button	What It Does
Ascend Soldier	Makes the soldier climb stairs or rise a level on alien sites (bases and ships) that have lifts between levels. If a soldier has a flying suit (a type of armor available later in the game), you can click this button to raise the soldier to the next level. Button location on control bar: far left, top row.
Descend Soldier	Does the opposite of the Ascend Soldier button. Soldiers on a level above ground level can also descend by jumping down—just click on the ground location. Button location on control bar: far left, bottom row.
Stand/Kneel Soldier	Makes a standing soldier kneel down, or vice versa. When kneeling, a soldier has better accuracy when firing and less chance of getting hit by alien fire. At times, kneeling can place an alien in a line of sight or, alternatively, hide an alien from the player. A kneeling soldier automatically stands up when moved to a different location (no crawling in this game). Soldiers can turn in place while kneeling, however. Button location on control bar: third from left, bottom row.

Often, you want a soldier to face a different direction, since soldiers can't shoot what they can't see. To change the direction a soldier is facing, move the rectangle cursor where you want the soldier to face, and click the right mouse button. The soldier will turn, expending a small number of time units.

WARNING

Any movement, no matter how slight, has the potential of drawing alien fire.

FIRING WEAPONS

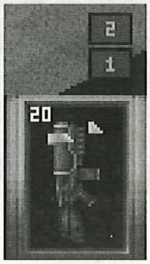
Moving around the battleground is enjoyable, but the whole point is to take out the aliens who have invaded the place. To do this, you need to master the use of weapons. Actual mastery is covered in Part Four, "Tactical Operations." For now we'll simply look at how to find targets and fire at them.

NOTE

It's not necessary to change actual locations to spot an alien. Sometimes simply standing up or turning in place brings an alien into a soldier's line of sight.

FINDING TARGETS TO FIRE AT

Aliens become visible to soldiers when they enter a soldier's line of sight. They do so either by moving into the line of sight during the alien turn, or, during your own turn, when a soldier moves to a location from which aliens can be seen. The soldier must be facing the right way for the alien to be visible; fortunately, X-COM soldiers all have good peripheral vision.



When an alien is visible, a small, red, numbered square appears on the bottom-right of the Battlescape, just above the control bar. If two aliens are visible, two red squares appear (numbered 1 and 2), and so forth. These squares sometimes appear as soon as a soldier is selected. At other times, a soldier's movement causes them to appear.

ZEROING IN ON ALIENS

The red square is valuable for another purpose as well. Often when an alien is visible to the soldier, it's somewhere off the screen. Clicking the red square centers the screen on the alien, letting you see exactly where it is (moving the cursor over the alien causes it to turn a flashing red). Once you know where an alien is, you can move other soldiers into position to fire at the creature as well. To return to the soldier, click the Center Display on Soldier button (see Figure 3.3). If you're planning to fire at the alien, it's not necessary to do this.

During night battles, you can sometimes click on a red square and *still* not see the alien. When this happens, move the rectangular cursor to the exact center of the display; that's where the alien is. Move the cursor until it flashes red, which indicates where the creature is.

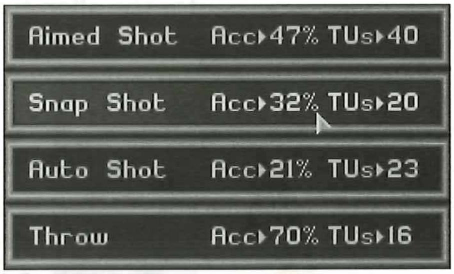
TIP

Turning the brightness up on your monitor sometimes reveals items your soldiers see but you don't.

FIRING AT TARGETS

Once you've spotted an alien, you can fire at it. "Fire" here is used as a generic term, covering shooting, throwing, or simply using a weapon. X-COM sports many weapons and items, and several of them are available through the firing procedure.

The selected soldier's hands are represented by the two large squares on either side of the Battlescape control bar. Usually, at least one hand is holding a weapon (if not, go back to the troop ship and get one). To fire a weapon, click on the large square. This yields the Firing menu. It tells you the options available, your chances of success (Accuracy as a percentage) with each option, and how many TUs each action will expend.



Several different types of options can appear on the Firing menu, depending on the type of weapon you are holding and your location. Options include the following:

Firing Option	What It Means
Aimed Shot	Your soldier takes careful aim and fires. Uses the most TUs of any option. Unfortunately, X-COM lets you choose this option even if you don't have enough TUs, which means you'll spend way too much time trying an Aimed Shot, finding out you don't have enough time, and choosing a Snap Shot instead.
Snap Shot	The most frequently used shot, this one has reasonable accuracy and takes fewer TUs. Often you can get two or more Snap Shots away in one turn.
Auto Shot	The soldier fires three bursts in the alien's direction. Each shot has a lower chance of success than an Aimed or Snap Shot, but since there are three it can be useful.
Prime Grenade	When using grenades, they have to be primed. When you choose this option, a window appears with 24 numbers (see Figure 3.8). Choose the number of turns ahead you want the grenade to detonate. For example, if you choose, it will detonate immediately. Be careful about this. Often you'll have enough TUs to prime the grenade, but not enough to throw it. Not having enough time to throw a grenade is a good way to get yourself killed, and the game doesn't automatically tell you when you're killed either.

Throw	You can throw just about anything, but this is useful primarily for grenades and high explosives. When the grenade is primed, you throw it where you want it to detonate. It will explode on the turn you selected when you chose the Prime Grenade firing option. If one of your soldiers runs out of ammo or needs a specific weapon, another soldier can throw the ammo or weapon to him.
Stun	If you're carrying a stun rod, and you're standing next to an alien, you can try to stun it. Stun has a 100-percent accuracy rate, but stronger aliens must be stunned more than once for the stun to take effect. A stunned alien crumples to the ground, and you can pick it up and take it with you. Stunned aliens stay stunned for quite a while, but if you take too long to win the battle, they might become conscious and escape.

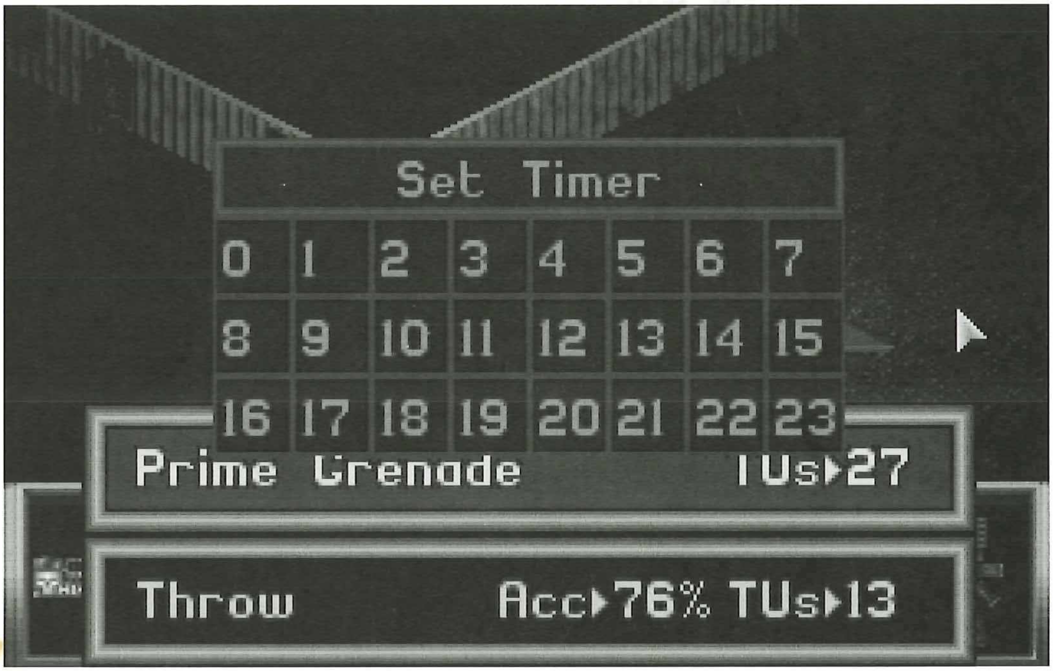


FIGURE 3.8 *The Prime Grenade screen showing turn numbers*

RIGHT-CLICK TO CANCEL FIRE ORDERS

The right mouse click is extremely important. If you want to cancel a Fire order, right-click. If you don't do this, the Fire order will still be active. What happens if you move to a better location or select another soldier, but forget to right-click to cancel the Fire order? What happens is, your selected soldier fires wherever you left-click, at a pointless location or, worse, at one of your own squad members.

GETTING A SHOT AWAY

Enough with getting everything ready. Time for the actual shot. As soon as you select your firing option, the Firing menu disappears and the cursor becomes a cross hair (a cross that represents a target). With the mouse, move the cursor to the alien. When it starts flashing, click the left mouse button. Your soldier will fire the weapon.

Well, usually. You might get a message saying "Not Enough Time Units," which means you can try another type of fire or wait till next turn. Or the control bar might say "No Line of Fire," which means you can see the alien but there's something blocking your actual firing line.

If your line is blocked, you can move the soldier to another location and try again. To do so, right-click anywhere on the Battlescape to cancel the Fire order, then move as normal. You can try to fire again once the soldier has moved.

LET NOTHING STAND IN YOUR WAY!

You can fire at anything in this game, not just aliens. You can even fire at other members of your squad if you're so inclined. More importantly, though, you often need to fire at barriers (walls, trees, hedges, fences, etc.) to blow them out of the way. The procedure for firing at barriers is the same as firing at aliens. Click on the weapon, choose the type of shot, position the cursor over the target, and click the left button.

You can also target an alien by selecting the type of fire and then clicking the cross hair on the small red square that represents a visible alien. Be careful you don't miss the square, though. If you do, you'll fire pointlessly.

Aliens either crumple up or remain standing when you fire at them. If they crumple up, it usually means they're dead. If you knock them unconscious, they're counted as captured (more points and good research opportunities). If an alien remains standing after you fire, it's either wounded or completely unaffected.

After firing, as long as you have enough TUs remaining, you can fire again. Or you can move the soldier to a new location, or switch to another soldier and come back again.

ENDING A TURN

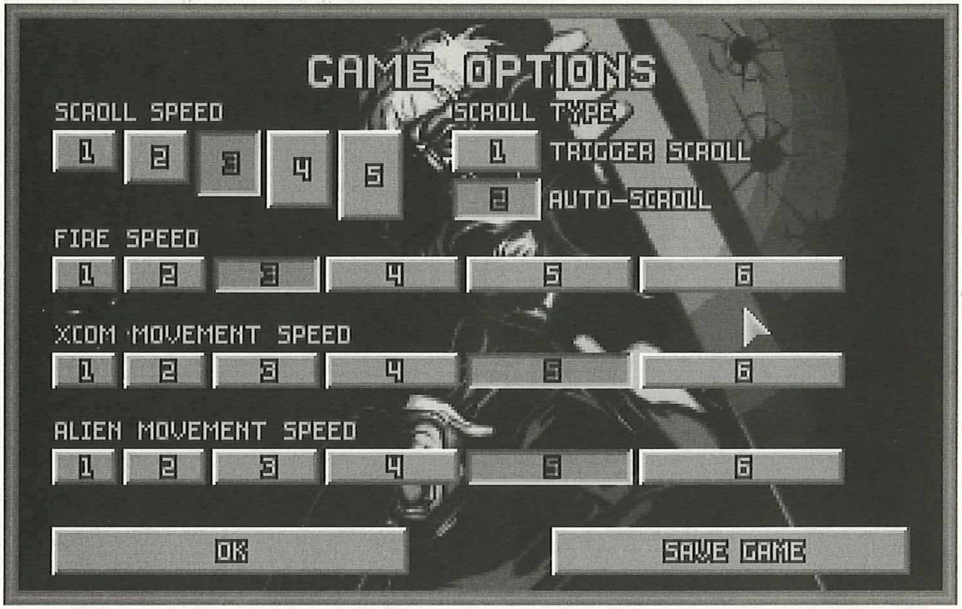
When you've done everything you want, click the End Turn button on the control bar (far right, top row). This ends the turn and begins the alien turn. If no more aliens remain standing, the mission is over.

ABORTING A MISSION

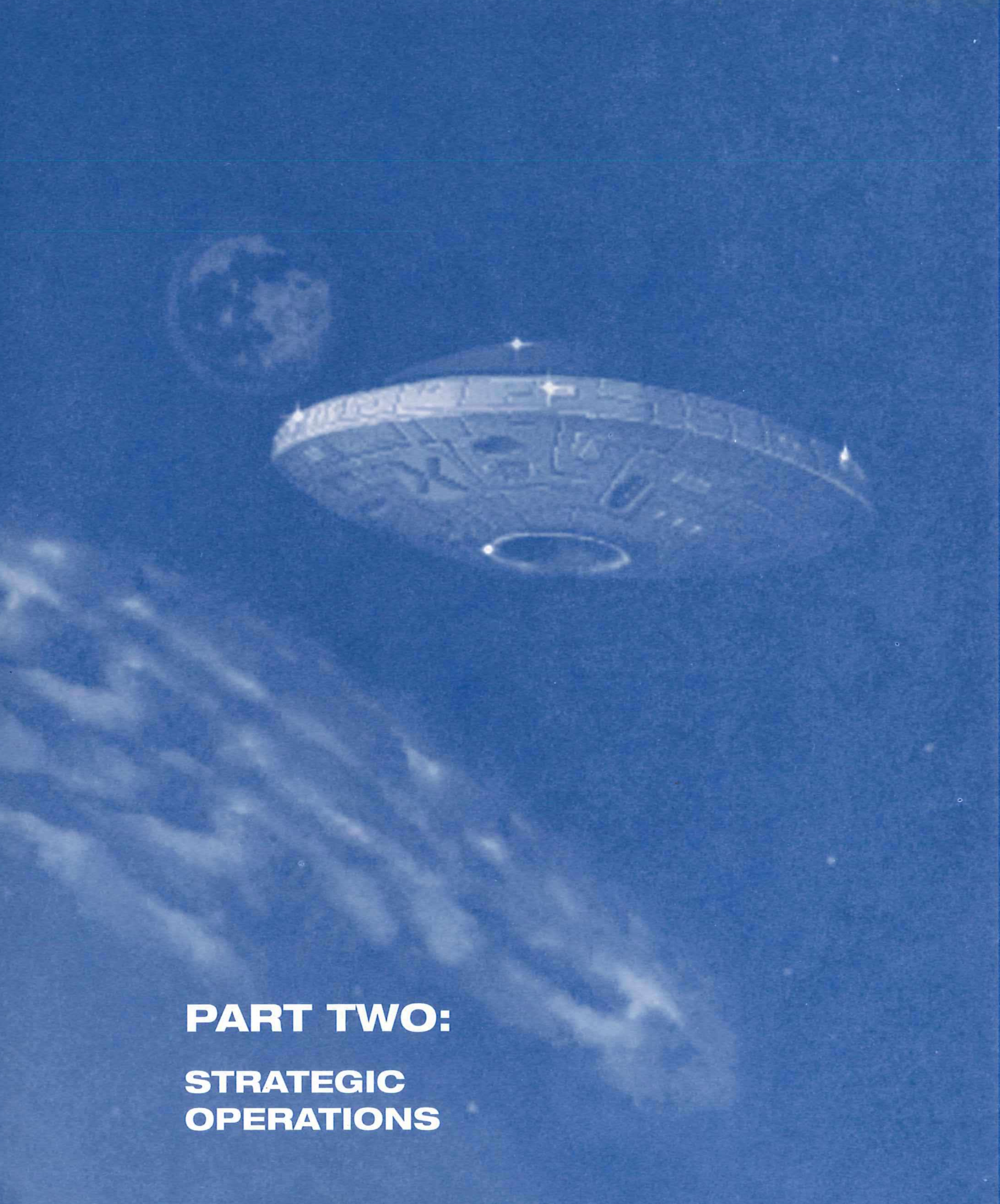
If things are going badly, you might have to abort the mission. To do so, move your soldiers inside the troop ship and click the Abort Mission button on the Battlescape control bar (far right, bottom row). You won't get many points (in fact, you could lose some), but at least your troops will be alive. If you leave soldiers outside the ship before aborting, you lose them.

SAVING A GAME

On the control bar is a button that looks like a question mark (bottom row, second from right). This yields the Options menu. From here you can adjust several viewing options, but more importantly you can save your current game. Clicking Save Game takes you to the Saved Game window.

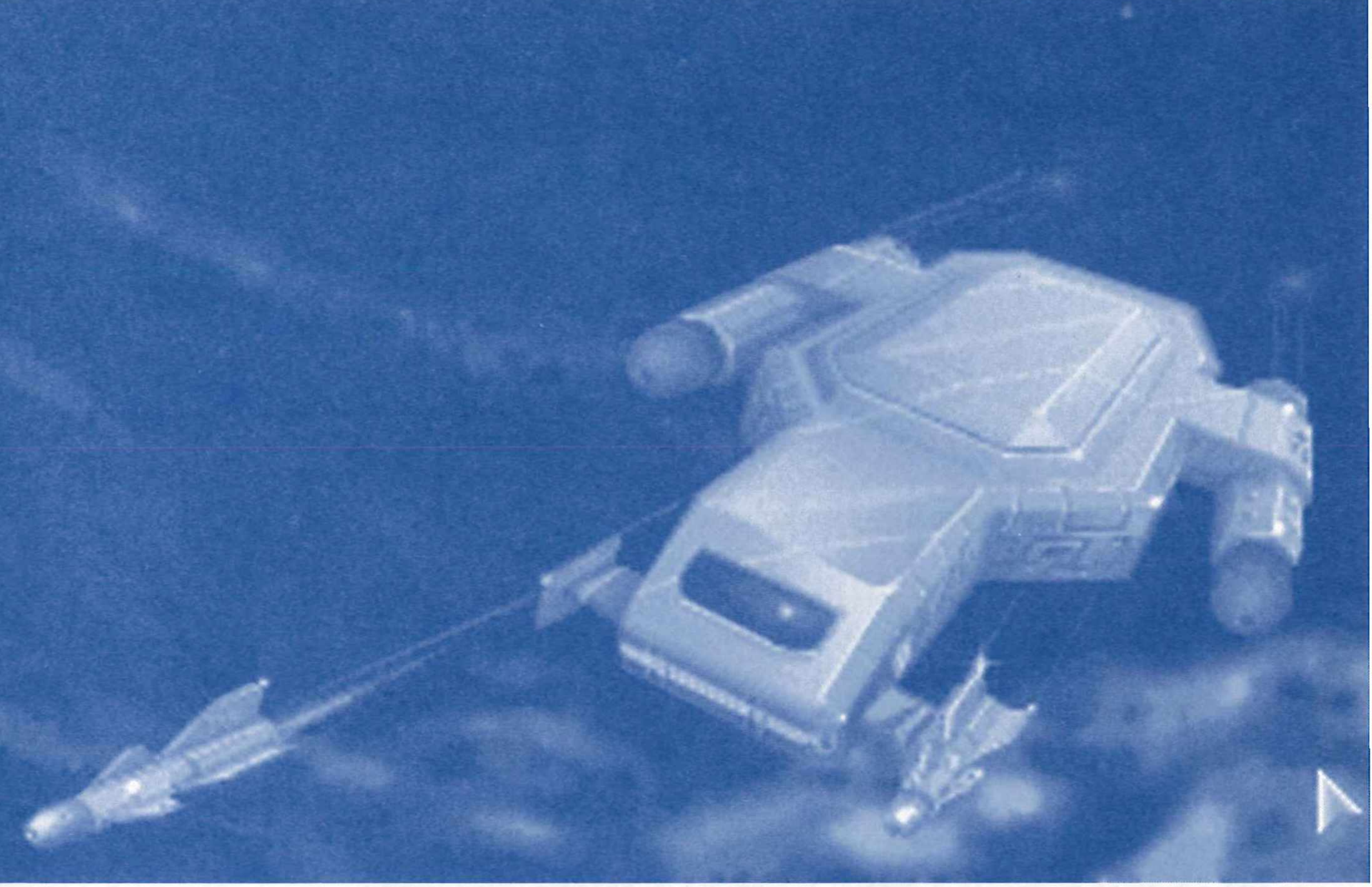

GAME OPTIONS
SCROLL SPEED
1 2 3 4 5
SCROLL TYPE
1 TRIGGER SCROLL
2 AUTO-SCROLL
FIRE SPEED
1 2 3 4 5 6
XCOM MOVEMENT SPEED
1 2 3 4 5 6
ALIEN MOVEMENT SPEED
1 2 3 4 5 6
OK
SAVE GAME

During battles, save often. That way, you can abort the mission and pick it up where you left off. While doing this might seem like cheating (it's a tad unrealistic, I realize), aborting is often the only way to get through a difficult mission. It's extremely easy to get your squad wiped out in this game, especially at the higher difficulty levels, and saving during battles can help a great deal.



PART TWO:

STRATEGIC OPERATIONS



CHAPTER FOUR

MASTERING THE AIR GAME

FOUR

X-COM's air game is fought on the Global Display, which makes the air game a strategic rather than a tactical consideration. In fact, there aren't many tactical issues in the air game: You simply fly your aircraft to the part of the globe where they are needed and engage in air-to-air combat or patrol missions.

Despite its simplicity, however, the air game is crucial. Your interceptors must keep alien incursions to a minimum and locate alien bases that formed after aliens got through your defenses. If you don't conduct a good air game, if you don't upgrade your interceptors and their weaponry, if you don't scout the planet in search of growing alien activity, you quite simply won't win the game.

BUYING AND BUILDING AIRCRAFT

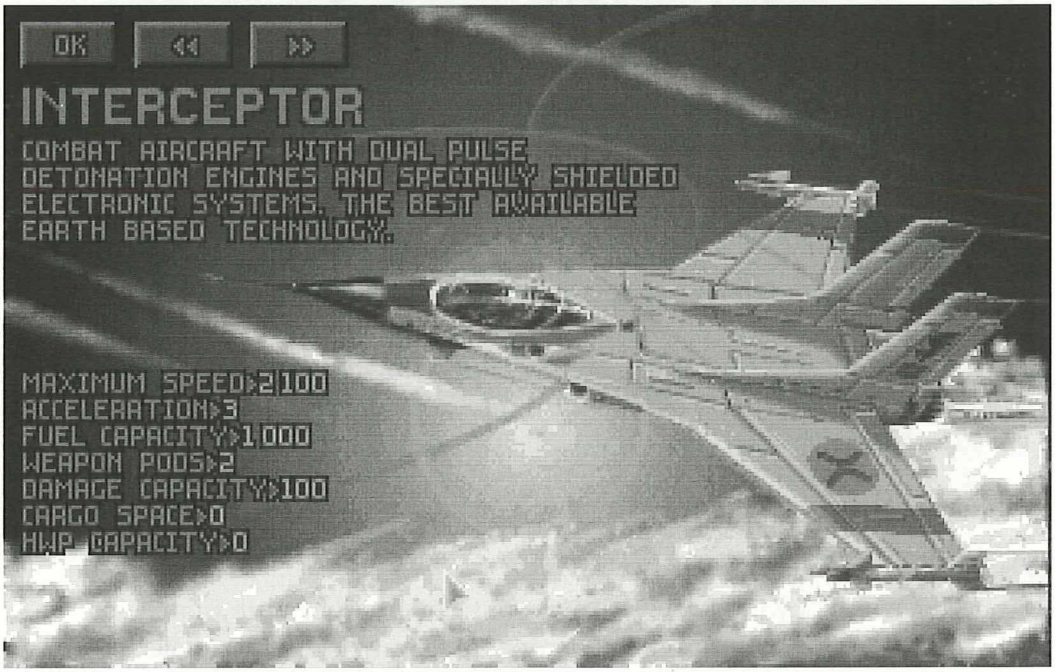
There are two types of aircraft in X-COM, combat and transport. Although both fly according to the intercept procedure (see Chapter 1 for details), we'll call combat aircraft interceptors and transport aircraft transports. Why? Because it makes more sense from the standpoint of military terminology.

The difference between interceptors and transports is simple. Interceptors engage in air-to-air combat; transports carry soldiers to battlegrounds. Fine, no problem, until you get to the ships that do both. Two types of aircraft you can build in this game—both of them based on alien technology—handle interception and transport duties alike. But the distinction is still okay, because they do these things separately. The benefit of interceptor-transport aircraft is that they can shoot down a UFO and then land immediately at the site without sending a separate transport craft.

This chapter explains the types of aircraft available throughout the game, as well as details about how to acquire and use each type.

INTERCEPTOR

Figure 4.1 shows the basic Interceptor. You're given one of these to start the game, and you can buy more whenever you want by following the Purchasing and Recruiting procedure in the Base Display (see Chapter 2 for details).



INTERCEPTOR

COMBAT AIRCRAFT WITH DUAL PULSE DETONATION ENGINES AND SPECIALLY SHIELDED ELECTRONIC SYSTEMS. THE BEST AVAILABLE EARTH BASED TECHNOLOGY.

MAXIMUM SPEED>2100
ACCELERATION>3
FUEL CAPACITY>1000
WEAPON PODS>2
DAMAGE CAPACITY>100
CARGO SPACE>0
HWP CAPACITY>0

FIGURE 4.1 *The standard-issue Interceptor*

The Interceptor is a very capable craft. However, it's too slow to catch many of the larger UFOs, and too vulnerable to their fire. You can equip Interceptors with increasingly sophisticated weapons, however. An Interceptor with sophisticated weapons is an excellent craft for late in the game, when you can't afford the resources or the time to produce enough Firestorms or Avengers to fill all your hangars.

Use Interceptors to take out UFOs sized Very Small, Small, or Medium. Make sure they're carrying decent weapons, though. Replace the cannon with avalanche missiles at the very beginning of the game, and keep upgrading as you go along.

Consider placing an Interceptor in a hangar at every base you build. While it may not seem necessary, especially if you have advanced craft elsewhere, Interceptors are excellent for taking out the mass of smaller UFOs that enter the atmosphere. But they have a limited range.

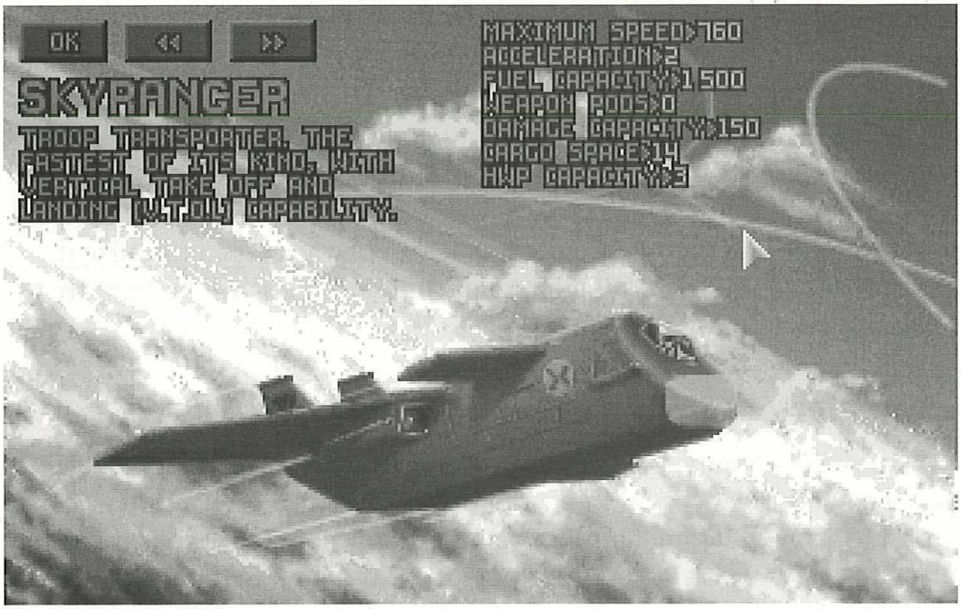
INTERCEPTOR STATS

Aircraft Type: Interceptor
Availability: Purchase from beginning of game
Cost per unit: $600,000
Alien materials needed: N/A
Time to build: N/A
Maximum Speed: 2100
Acceleration: 3
Fuel Capacity: 1000 gallons
Weapon Pods: 2
Damage Capacity: 100
Cargo Space: 0
HWP Capacity: 0

SKYRANGER

The Skyranger, shown in Figure 4.2, is your troop transport ship from the beginning of the game. It is good for one thing only—carrying soldiers from base to an alien site. It's not especially fast, and it has limited storage capability, but it's fine for most missions. The only time you can't make use of it is during the endgame, when you need an Avenger to carry troops. If you buy a tank early in the game and load it on a Skyranger, your odds of winning will increase tremendously.

It's possible to get through the game with only one Skyranger. Much better, however, is to station two or three Skyrangers at different bases throughout the world. Each can carry a crew to landing sites, where the crew can take care of more UFOs (and hence gain more materials, artifacts, and support). Stationing Skyrangers at different bases allows each crew to heal and re-equip properly before heading out on the next mission, and lets you handle the rash of small UFOs efficiently.



SKYRANGER

TROOP TRANSPORTER. THE FASTEST OF ITS KIND, WITH VERTICAL TAKE OFF AND LANDING (V.T.O.L) CAPABILITY.

MAXIMUM SPEED>760
ACCELERATION>2
FUEL CAPACITY>1500
WEAPON PODS>0
DAMAGE CAPACITY>150
CARGO SPACE>14
HWP CAPACITY>3

FIGURE 4.2 *The Skyranger troop transport*

SKYRANGER STATS

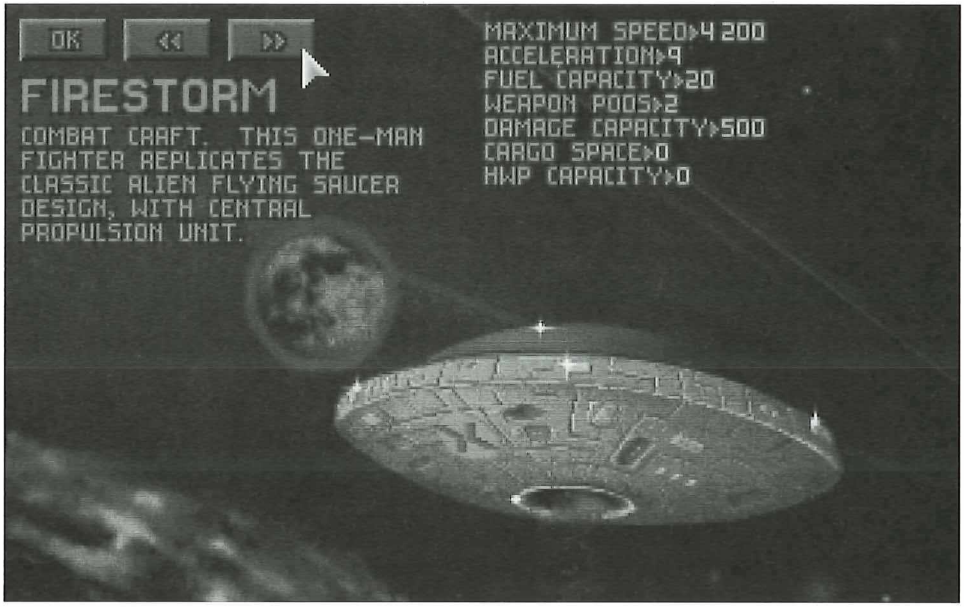
Aircraft Type: Transport
Availability: Purchase from beginning of game
Cost per unit: $500,000
Alien materials needed: N/A
Time to build: N/A
Maximum Speed: 760
Acceleration: 2
Fuel Capacity: 1500 gallons
Weapon Pods: 0
Damage Capacity: 150
Cargo Space: 14
HWP Capacity: 3

Skyrangers can carry HWPs (heavy weapons platforms). A number of different weapons can be carried on HWPs, but the most important of all is tanks. A tank, early in the game, can save you a great deal of grief.

One effective way of using the Skyranger is to use it as a UFO "tailer." If you want a UFO to land so you can capture aliens and salvage ship components and materials, intercept it with a Skyranger rather than an Interceptor. When the Air-to-Air combat window appears, minimize it and simply tail the UFO. When it lands, the Skyranger will be right there to assault the landing site.

FIRESTORM

As shown in Figure 4.3, the Firestorm looks every bit like a classic UFO out of a 1950s science fiction movie. In X-COM, it's a high-speed interceptor capable of taking far more damage than the Interceptors, but one that can't stay out on patrol very long. It's extremely useful as a replacement for Interceptors, but more useful still as a second interceptor kept at the same base as an Interceptor.



FIRESTORM

COMBAT CRAFT. THIS ONE-MAN FIGHTER REPLICATES THE CLASSIC ALIEN FLYING SAUCER DESIGN, WITH CENTRAL PROPULSION UNIT.

MAXIMUM SPEED>4 200
ACCELERATION>9
FUEL CAPACITY>20
WEAPON PODS>2
DAMAGE CAPACITY>500
CARGO SPACE>0
HWP CAPACITY>0

FIGURE 4.3 *The Firestorm, based on alien research*

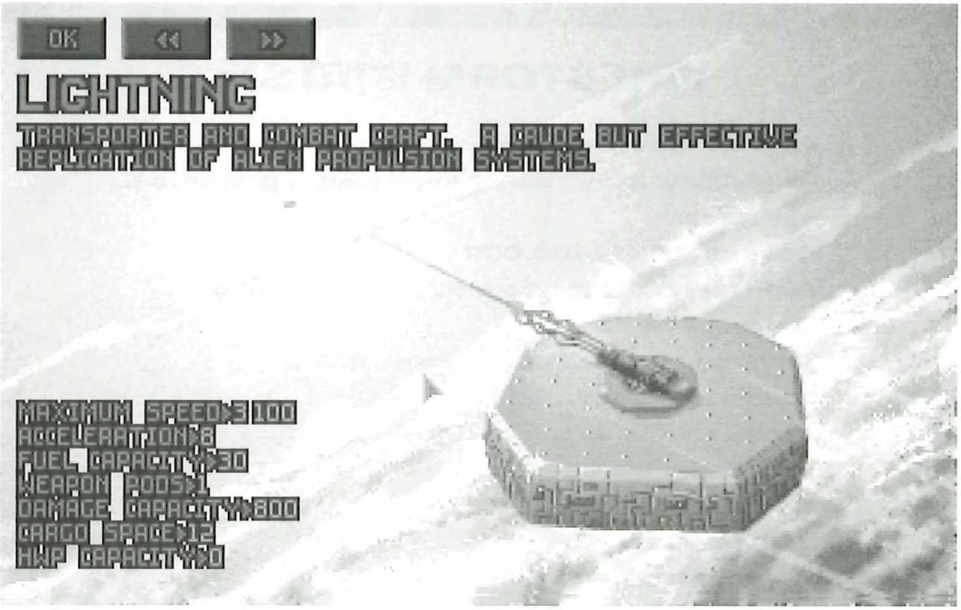
FIRESTORM STATS

Aircraft Type: Interceptor
Availability: After researching alloys, power unit, navigation
Cost per unit: $400,000
Alien materials needed: 65 alloys, 1 power source, 1 navigation
Time to build: 14,000 engineer hours
Maximum Speed: 4200
Acceleration: 9
Fuel Capacity: 20 gallons
Weapon Pods: 2
Damage Capacity: 500
Cargo Space: 0
HWP Capacity: 0

The problem with the Firestorm, like all alien craft, is that is requires special materials to build. These materials must all be manufactured, and you can manufacture them only after researching them. Unfortunately, the Firestorm won't be available till later in the game, and by that point you might be wise to go all out and build an Avenger instead.

LIGHTNING

The Lightning, shown in Figure 4.4, is the first ship you can build that combines the functions of interceptor and transport craft. It can engage in air-to-air combat while carrying troops, but not nearly as well as the Avenger. Still, the Lightning is cheaper and faster to build than the Avenger, and it flies much faster. It has more cargo capacity than the Skyranger. It can't carry heavy weapons platforms though.



LIGHTNING

TRANSPORTER AND COMBAT CRAFT. A CRUDE BUT EFFECTIVE REPLICATION OF ALIEN PROPULSION SYSTEMS.

MAXIMUM SPEED>3100
ACCELERATION>8
FUEL CAPACITY>30
WEAPON PODS>1
DAMAGE CAPACITY>800
CARGO SPACE>12
HWP CAPACITY>0

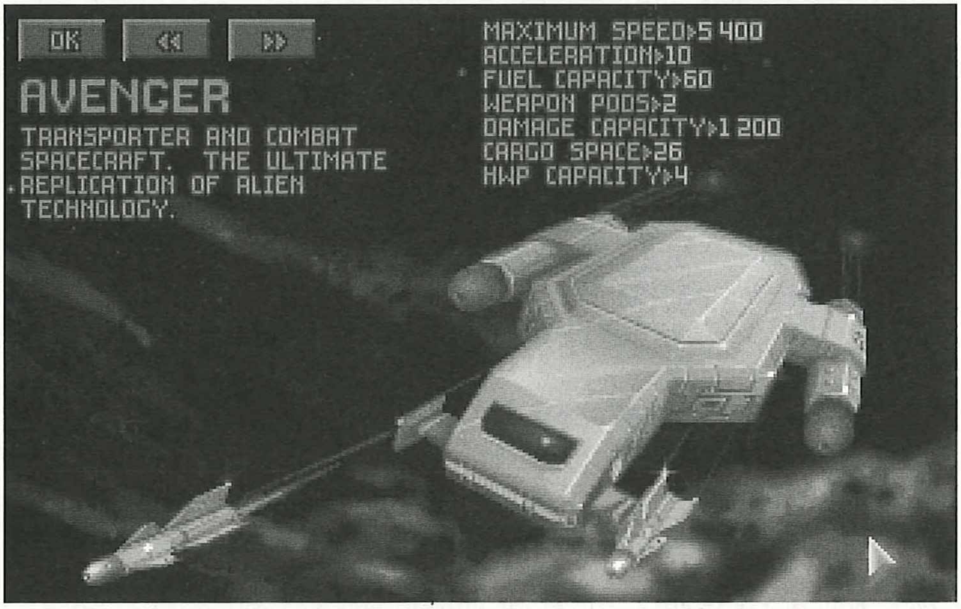
FIGURE 4.4 *The Lightning, a hybrid of the interceptor and a transport aircraft*

LIGHTNING STATS

Aircraft Type: Interceptor and transport
Availability: After researching alloys, power source, navigation
Cost per unit: $600,000
Alien materials needed: 85 alloys, 1 power source, 1 navigation
Time to build: 18,000 engineer hours
Maximum Speed: 3100
Acceleration: 8
Fuel Capacity: 30 gallons
Weapon Pods: 1
Damage Capacity: 800
Cargo Space: 12
HWP Capacity: 0

AVENGER

This is it, folks—the ultimate aircraft for the busy X-COM executive. Available only after extensive alien research, and costing a great deal of both time and money, the Avenger is extremely fast, holds ample cargo (including a large number of heavy weapons platforms), and carries more than enough fuel to get by. The Avenger is shown in Figure 4.5.



AVENGER

TRANSPORTER AND COMBAT SPACECRAFT. THE ULTIMATE REPLICATION OF ALIEN TECHNOLOGY.

MAXIMUM SPEED▸5 400
ACCELERATION▸10
FUEL CAPACITY▸60
WEAPON PODS▸2
DAMAGE CAPACITY▸1 200
CARGO SPACE▸26
HWP CAPACITY▸4

FIGURE 4.5 *The Avenger, needed to win the game*

Build an Avenger as soon as you possibly can. No other ship has its capabilities. But don't let it get destroyed. If you do, you might run short of materials for another Avenger. When using the Avenger, save your game before you send it out, and restore if it gets shot down.

For large UFOs, send the Avenger out with another interceptor that has good weaponry (you can intercept with as many aircraft as you want). Engage the smaller craft first, letting it hit the UFO as often as possible. Before it gets destroyed, pull it back and toss the Avenger into the fray to mop up. You have no choice about building an Avenger. You need one to complete the final mission. See Part Five for details.

AVENGER STATS

Aircraft Type: Interceptor and transport
Availability: After researching alien power unit
Cost per unit: $900,000
Alien materials needed: 120 alloys, 2 power sources, 1 navigation
Time to build: 34,000 engineer hours
Maximum Speed: 5400
Acceleration: 10
Fuel Capacity: 60 gallons
Weapon Pods: 2
Damage Capacity: 1200
Cargo Space: 26
HWP Capacity: 4

HOW MANY AIRCRAFT DO I NEED?

As the game proceeds, you'll need at least three bases with interceptors and two with transport aircraft. Your home base should have at least two interceptors and one transport craft, with a similar base on the other side of the world. In between, bases with one interceptor apiece will work nicely. The idea is to cover the globe with interceptor capabilities, since late in the game the UFOs appear in nothing less than a flurry.

Remember that it's cheaper to build an additional hangar and another aircraft than to start a new base. As better aircraft become available, you're much better off establishing fewer bases with greater air strength than many bases with lower strength. Always opt for quality over quantity in this regard.

ATTACK ONE CRAFT AFTER THE OTHER

Keep in mind that you can intercept a UFO with more than one aircraft. Send the first out, then the second, and then the third if you wish. Sending aircraft out one after the other is an excellent way of saving on aircraft. As one becomes damaged, pull it out of combat and send the next one in. For Very Large UFOs, the ones with incredible firepower, sending craft one at a time is often the only way to down them, especially if you're not using advanced aircraft. But you still need good weapons, or the number of ships won't matter much.

EQUIPPING AIRCRAFT

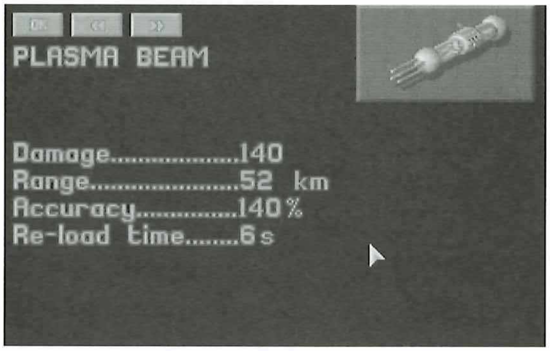
No matter how many aircraft you possess, they're no good without the proper equipment. Your first Interceptor begins the game armed with a stingray launcher and a cannon, but that won't get you through the entire game. You need better weapons, and some of them are available only by researching alien technology.

Equipping aircraft is covered in Chapter 2. Here, I'll give you some ideas and suggestions for equipping aircraft. Essentially, you want the best possible weapons on interceptors, and the best possible crew members, armor, and weapons on transports. But since you won't have the resources to buy or manufacture everything you want, you have to make some important decisions.

EQUIPPING INTERCEPTOR AIRCRAFT

Right off the bat, purchase an avalanche launcher and avalanche missiles for your Interceptor. The minute they're available, replace your cannon with the avalanche launcher. Be sure to replenish supplies of avalanche and stingray missiles regularly. Don't be caught without them.

Build laser cannons as soon as you can, and replace your stingrays and avalanches when the laser canons are ready. You're not likely to need better weapons, especially if you have a number of Interceptors and one or two Avengers. Sending two Interceptors with plasma beam weapons against even the largest UFO will usually prove more than enough to take care of it.

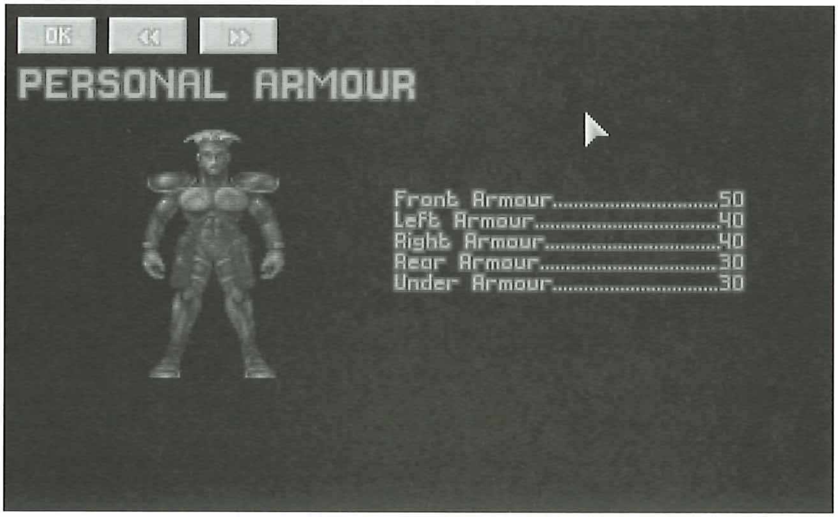


PLASMA BEAM

Damage..................140
Range.....................52 km
Accuracy...............140%
Re-load time........6 s

EQUIPPING TRANSPORT AIRCRAFT

If you build Lightnings or Avengers, equip them for air-to-air combat with the best weapons you can come up with, preferably plasma beams. For all transports, however, the main questions have to do with crews and their equipment. The use of weapons and armor is covered in Part Three. For now, we're simply concerned with what to pack on the transports.

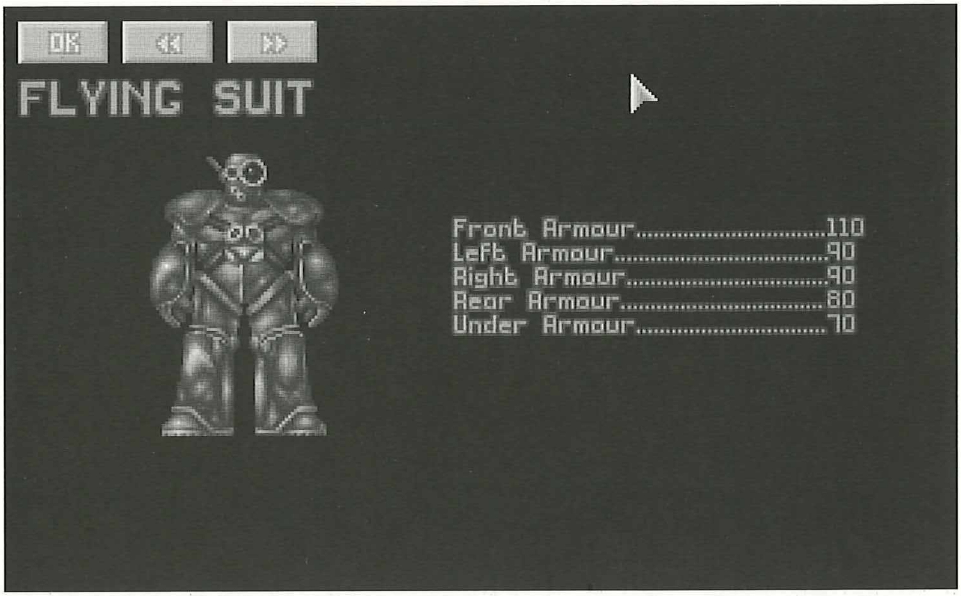


PERSONAL ARMOUR

Front Armour..............................50
Left Armour.................................40
Right Armour...............................40
Rear Armour................................30
Under Armour..............................30

As soon as you've done enough research (the game will let you know), manufacture enough personal armor to outfit the entire crew.

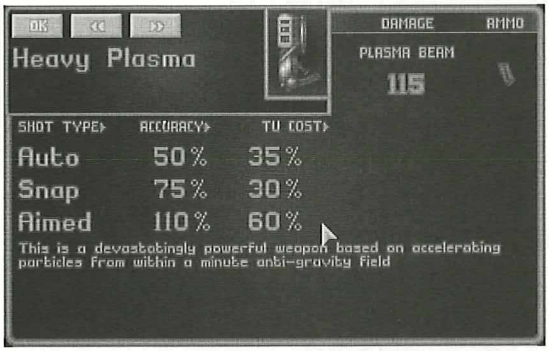
Later, upgrade as much of this armor as you can reasonably afford to, but go for flying suits rather than power suits. Flying suits are more expensive, but they're also better as armor. And a soldier in a flying suit uses less energy, because the soldier can fly over difficult terrain and leap up stairs in a single bound without having to fight through obstacles. In a flying suit, a soldier can spot aliens sooner because he or she can go over obstacles rather than through them. Flying Suits are the ultimate in armor—and fun besides.



FLYING SUIT

Front Armour..............................110
Left Armour..............................90
Right Armour..............................90
Rear Armour..............................80
Under Armour..............................70

EQUIPPING THE SOLDIERS ON BOARD



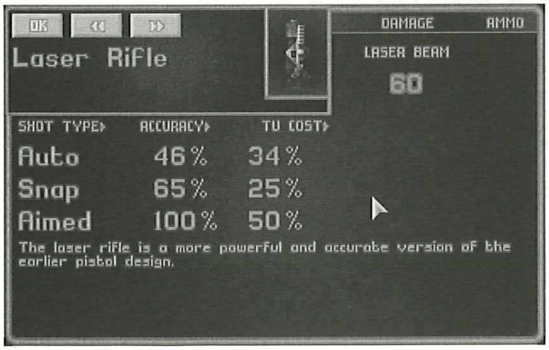
Heavy Plasma

DAMAGE AMMO

PLASMA BEAM 115

SHOT TYPE›	ACCURACY›	TU COST›
Auto	50%	35%
Snap	75%	30%
Aimed	110%	60%

This is a devastatingly powerful weapon based on accelerating particles from within a minute anti-gravity field



Laser Rifle

DAMAGE AMMO

LASER BEAM 60

SHOT TYPE›	ACCURACY›	TU COST›
Auto	46%	34%
Snap	65%	25%
Aimed	100%	50%

The laser rifle is a more powerful and accurate version of the earlier pistol design.

You might as well trash the pistols you're given to begin the game. They just aren't any good against aliens. Sell them and buy rifles instead. At the same time, however, start researching laser weapons immediately, because rifles aren't much good either. As soon as you possibly can, build laser rifles (laser pistols aren't worth the effort), and think about replacing these with heavy lasers as soon as you can get your research and manufacturing up to snuff. The laser rifle does less damage than the heavy laser, but is more accurate and capable of Auto Shots, so in some ways the laser rifle is more effective.

Eventually, you'll want to replace everything with heavy plasma weapons. These weapons are simply devastating. You recover them from alien sites, so you'll always have a ready supply. Besides plasma weapons, remember to load heavy plasma clips on the transport as well.

PACK THE BEST!

Intermediate weapons, such as plasma rifles and other items, are useful but not as effective as the best stuff. Don't settle for less than the best unless you have neither the time nor resources to research or manufacture it.

Other necessary weapons to pack into the transport are grenades, which can knock out a packed area quite nicely, and high explosives, which are much more effective than grenades and significantly more worthy of your attention.

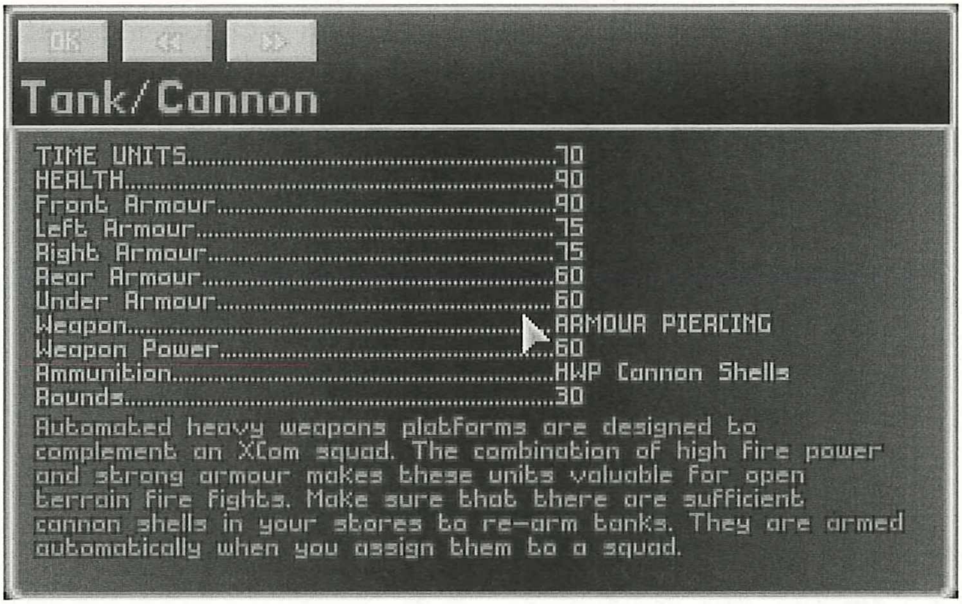
Smoke grenades have limited use. They hide you from the enemy to some extent, but you can't see very well either. Proximity grenades, which explode when something comes near them, are fine as long as you don't stumble over them yourself. Items such as electro-flares, which illuminate the soldier's immediate surroundings at night, aren't as useful as they sound.

One extremely important item early in the game is the stun rod. Pack a few of these, because without them you won't be able to capture aliens. Later, replace them with stun bombs, which require small launchers to fire. Stun bombs are much better at stunning aliens and can take care of more than one alien at a time.

As soon as the game begins, purchase a tank/cannon, shown in Figure 4.6, and at least 30 rounds of HWP cannon shells. Place it in the Skyranger and start using it immediately. Chapter 7 explains why this weapon is so effective in the early going. Eventually, you'll want to replace it with a tank/laser cannon, and perhaps even a hovertank/plasma.

BRING ONLY THE BEST!

Equip your transports with the best crew members you can find, continuing to add one or two new recruits to the list. A squad of nine or so works well, so you should plan to have enough equipment to keep this number aboard.



Tank/Cannon

TIME UNITS	70
HEALTH	90
Front Armour	90
Left Armour	75
Right Armour	75
Rear Armour	60
Under Armour	60
Weapon	ARMOUR PIERCING
Weapon Power	60
Ammunition	HWP Cannon Shells
Rounds	30

Automated heavy weapons platforms are designed to complement an XCom squad. The combination of high fire power and strong armour makes these units valuable for open terrain fire fights. Make sure that there are sufficient cannon shells in your stores to re-arm tanks. They are armed automatically when you assign them to a squad.

FIGURE 4.6 *The tank/cannon, indispensable early in the game*

CHOOSING WHERE TO FIGHT

Even though you should intercept a UFO as soon as you're aware it exists, you don't have to do battle as soon as the Air-to-Air combat display appears on the screen. Instead, you can follow it until it reaches a more desirable location.

If you want to force the UFO to crash land immediately, with no concern about the location of the crash site, engage it in Air-to-Air combat as soon as you reach it.

If you want to be sure of giving yourself a chance to assault and loot a crashed UFO, engage in Air-to-Air combat only over land. Shooting down a UFO over water causes it to sink beneath the waves, and you can't salvage it. If you intercept the UFO over water, minimize the Air-to-Air Combat window and click the 1 Min time control to speed up the game. Tail the UFO until it reaches land, then maximize the window and fire away.

Sometimes, especially later in the game, you won't need the minimal loot a crashed UFO has to offer. In such a case, engage in combat over water. Minimize the Air-to-Air Combat window until the UFO is no longer above land, then maximize the window and blast it.

UFOs are much more valuable, in terms of aliens to capture, resources to plunder, and components to acquire, when they don't crash land. If you want a UFO to land safely, intercept it with a transport and tail it by minimizing the Air-to-Air Combat window. When it lands, you'll be asked immediately if you want to assault it with your troops. Say yes.

UFOs that have already landed intact can be intercepted by either transports or interceptors. Transports will simply fly to the site and launch an assault. If you want to destroy the UFO instead, fly to the landing site with an interceptor, then have it wait there until the UFO takes off. As soon as it does, the Air-to-Air Combat window will appear. At that point, you can combat it immediately, or minimize and wait until it's reached a location you prefer. Make sure you don't run out of fuel, though.

MASTERING THE AIR GAME: A CHECKLIST

☐ Equip your interceptor with avalanche missiles immediately.

☐ Take on *every* UFO.

☐ Shoot down UFOs until your squad gains experience, then tail them and let them land.

☐ Build a third hangar and second Interceptor ASAP.

☐ Research alien alloys and UFO components as soon as you've recovered them.

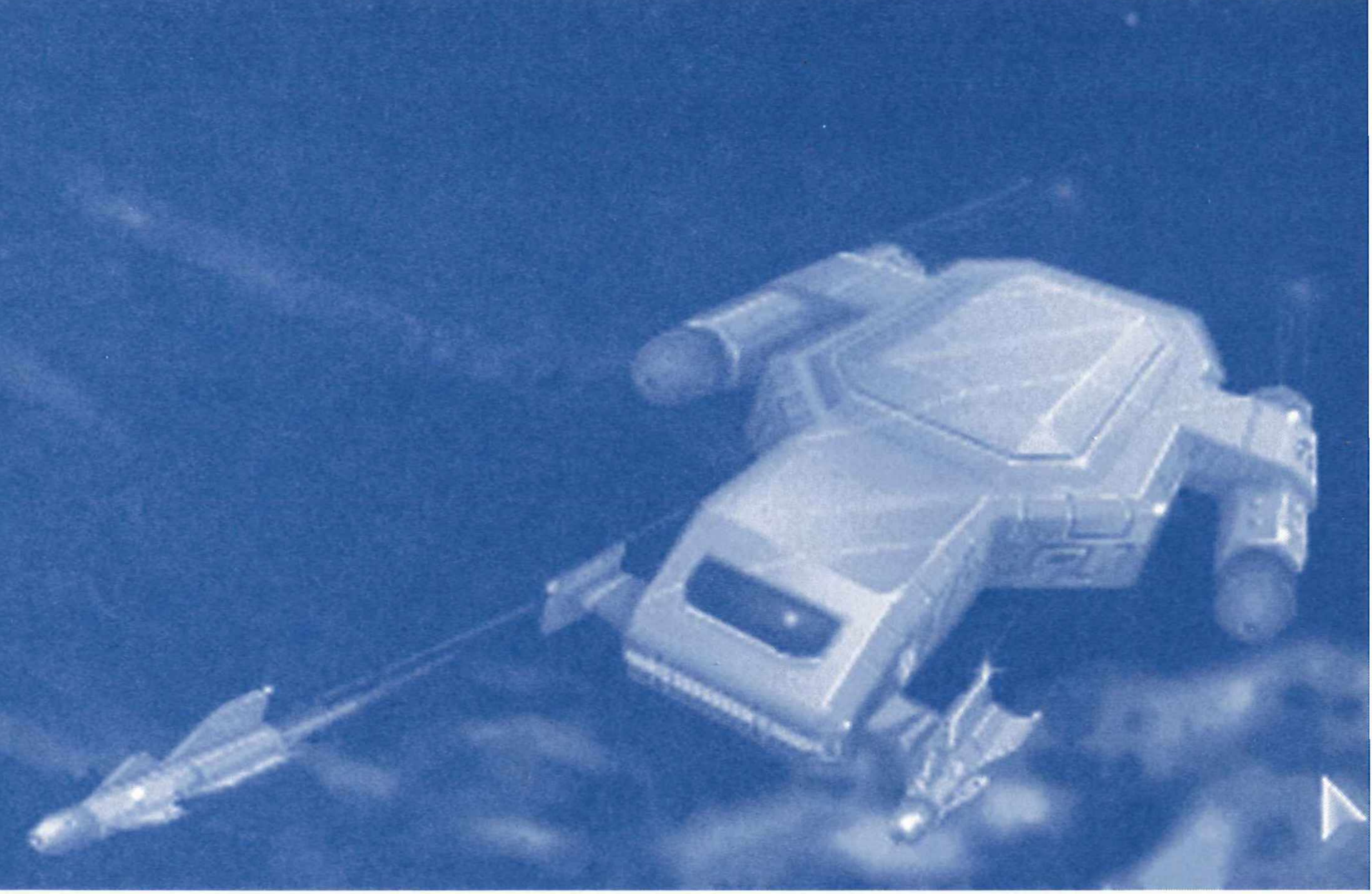
☐ Upgrade your Interceptors' weaponry to laser and then plasma.

☐ Forget about Lightning and Firestorms; aim to build an Avenger.

☐ If a UFO evades you, wait a couple of days and then patrol the area.

☐ Tail UFOs to shoot them down where you want them—on land early in the game, over water later on when you don't need them for research and materials.

☐ Keep in mind that you can intercept the same UFO with two or more aircraft simultaneously.



CHAPTER FIVE

MANAGING YOUR BASES

FIVE

You can't fight a war without an enormous amount of administrative, political, and economic support. X-COM represents this support in the activities of the Base Display, covered in detail in Chapter 2. It's time now to look at the best techniques and strategies for managing bases, because here lies much of the heart of the game.

Bases are underground structures designed to house X-COM initiatives. You start the game with one base, which you can place wherever you wish. From that point on, the Base portion of your game consists of adding new bases, building up the ones you already have, and using the bases to research new technologies and manufacture new items. The research and manufacturing arm is covered in Chapter 6. Here, we'll look at the other major aspects of base construction and management.

HOW MANY BASES DO I NEED?

The whole point of building bases is to provide places for you to concentrate your power so you can stem the tide of the alien invasion. Tempting as it might be, there's almost no point in concentrating all your power in one single base, for two important reasons.

First, the earth is a big place. In fact, it's far too big for one base to cover effectively with radar detection devices and air support, no matter how powerful the base is. Second, a large UFO that makes it through your defenses might land near one of your bases and attempt to capture it. If you have only one base and the aliens succeed in capturing it, you'll lose the game completely.

At the very least, you need a second base. The various difficulty levels, indeed, demand a different number of bases. There's no hard and fast rule about the number of bases you need to defend the planet effectively, but here's a simple guideline that works quite well:

Difficulty Level	Number of Bases Needed
Beginner	3
Experienced	4
Veteran	5
Genius	6
Superhuman	7

Keep in mind that your overall strategy determines how many bases you *actually* require. If you stock each base with a full complement of interceptors, transports, and research and manufacturing stations, and you make a point of building extensive radar-detection support, you don't need as many bases. You can cut the requirement by one base at the lower difficulty levels, and two or three at the higher levels. If your strategy is to have one extensive base and a number of bases for detection or interception, you might well need more bases than the number listed in the table. In general, though, the guideline should serve you well.

PLACING BASES AROUND THE GLOBE

The next question is where to place the bases. Figure 5.1 shows two Geoscape views of an Experienced-level game well into its final stages. Notice the three bases. Two, represented by two small squares, are in the U.S. and China, across the ocean from one another. The other Geoscape shows the U.S. base again, but this time it is coupled with a base in the Sahara Desert.

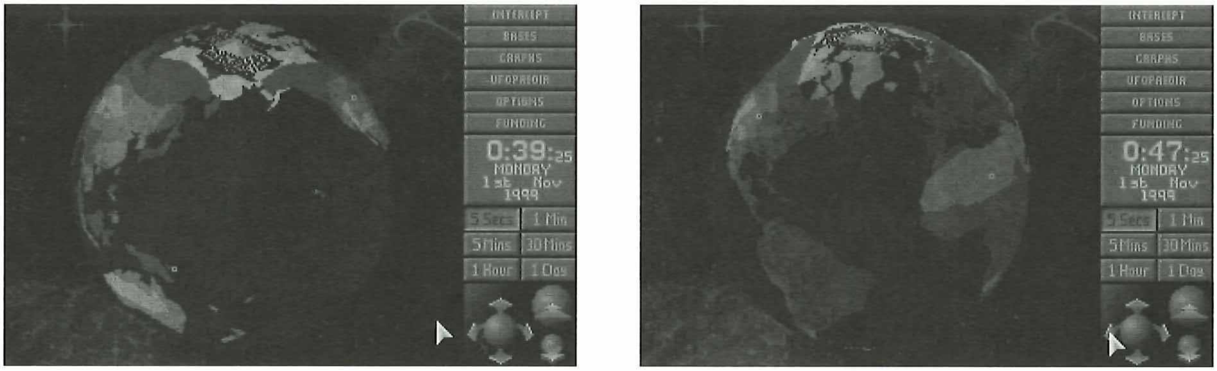

INTERCEPT
BASES
GRAPHS
UFOPAEDIA
OPTIONS
FUNDING
0:39:25
MONDAY
1st Nov
1999
5 Secs
1 Min
5 Mins
30 Mins
1 Hour
1 Day
INTERCEPT
BASES
GRAPHS
UFOPAEDIA
OPTIONS
FUNDING
0:47:25
MONDAY
1st Nov
1999
5 Secs
1 Min
5 Mins
30 Mins
1 Hour
1 Day

FIGURE 5.1 *Geoscapes showing bases in U.S. and China (left) and U.S. and Africa (right)*

Three bases spread out like this is a reasonable strategy, because it offers good protection for the entire globe, especially given the advanced detection technology employed at each base. However, as evidenced by the small square just northeast of Australia in the left-hand Geoscape, the bases haven't guarded the earth perfectly. This small square represents an alien base that has been detected by a patrolling interceptor.

Bases should be placed with the idea of defending large populations and powerful nations. Defending powerful nations at the expense of weak ones might seem a bit cynical, but the powerful countries' economies can support and pay for the X-COM project at high levels, and that means always trying to keep these nations happy. Typically, powerful countries have large populations as well, so protecting powerful countries and large populations go hand in hand.

BASIC BASE STRATEGY

Your first base should be in the U.S. or near Europe, with eastern China another possibility. A happy U.S. is a willing contributor to the X-COM project, and an unhappy Europe can make your life hell. For this reason, it's almost always wise to establish a second base immediately after the game begins, preferably near Europe or in China, in Europe to keep that part of the world happy and in China so you can ring the globe with detection.

Your second base is primarily a detection and interception base. It needs a large radar station and a hangar with an interceptor and the best possible weaponry. For now, the trick is to keep shooting UFOs down in areas where ground assaults aren't always possible, since you can't assault aliens on the ground anyway. Later, you'll build a ground assault team, in either the second base or the third, but early in the game that isn't possible.

You can build up to eight bases. If you build an entire contingent (keep in mind that you likely will never need all eight), consider one of the following base-building strategies:

Strategy A	**Strategy B**
1. U.S.	1. Sahara Desert
2. France	2. Canada/U.S. border
3. China	3. Malaysia
4. Central Africa	4. Western Russia
5. Australia	5. Australia
6. Brazil	6. Argentina
7. India	7. Central America
8. Arctic	8. India

Note how, in each strategy, the first base covers a wide area, the second oversees another important continent, and the third offers protection for a large population group. After that, it's a matter of plugging the gaps.

FACILITIES FOR YOUR BASES

Bases consist of facilities. Each facility exists for a specific purpose, and the capabilities of a base depend entirely on which facilities you've put in place. You need laboratories for scientists, living quarters for soldiers, and hangars for aircraft. You also need housing for detection and defense technologies, and a number of other structures as well.

Each base begins with an access lift, the unit that connects the base to the surface (remember, bases are underground). Beyond the access lift, you have to build all the facilities yourself. Each takes time and costs money, and can't be used until it's completed. For this reason, planning the expansion of bases is extremely important.

Actually, not all bases have to be built from scratch. Your first base, which you place at the very start of the game, comes with the following facilities: living quarters, a workshop, a laboratory, general stores, a small radar system, the access lift, and three hangars.

BUILD UP YOUR FIRST BASE

It's important to build up your first base, because you already have a good start on it. Add more labs and living space, for instance, and you can recruit more scientists and turn large numbers of them to the task of research. The same holds true of workshops and engineers. Once you've built workshops and recruited scientists, you can start manufacturing items. A bunch of people working together in the same location is more efficient, in X-COM at least, than the same number of people working in smaller groups in separate locations.

TYPES OF FACILITIES

Figure 5.2 shows a base and facilities list at the start of a game (left) and a much larger base and larger list much later in the same game (right). The additional facilities on the right-hand side were built as a result of continuing research. Building facilities like these provides more powerful defenses.

The types of facilities you can build are: living quarters, loboratories, workshops, radar systems, general stores, alien containment facilities, hangars, missile defenses, laser and plasma defenses, fusion ball defenses, grav shields, and hyper-wave decoders.

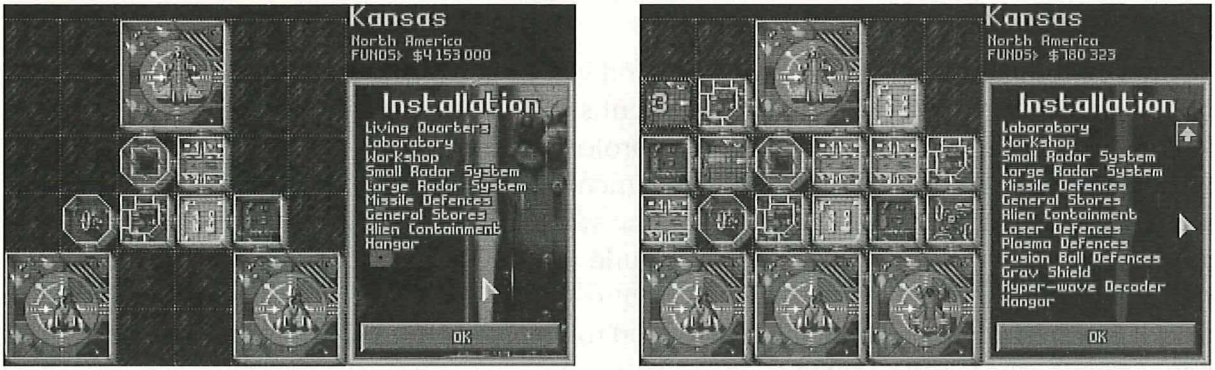

Kansas
North America
FUNDS> $4 153 000
Installation
Living Quarters
Laboratory
Workshop
Small Radar System
Large Radar System
Missile Defences
General Stores
Alien Containment
Hangar
OK
Kansas
North America
FUNDS> $780 323
Installation
Laboratory
Workshop
Small Radar System
Large Radar System
Missile Defences
General Stores
Alien Containment
Laser Defences
Plasma Defences
Fusion Ball Defences
Grav Shield
Hyper-wave Decoder
Hangar
OK

FIGURE 5.2 *Base and facilities list at the beginning of a game (left) and the same base and facilities list near the end (right)*

The following sections explain what each facility does and outline strategies for constructing facilities. The last five facilities described here—laser defenses, plasma defenses, fusion ball defenses, grav shields, and hyper-wave decoders—appear as the game progresses.

Living Quarters

Soldiers, scientists, and engineers need living quarters. Each living-quarter facility holds 50 people, and you'll quickly discover that you need more than just one. A fully functioning home base needs two early in the game, with a third and possibly a fourth added later. Since each person must be paid and maintained, this means a large commitment of expenses.

TIP

Human resources make things happen. Don't scrimp on living space.

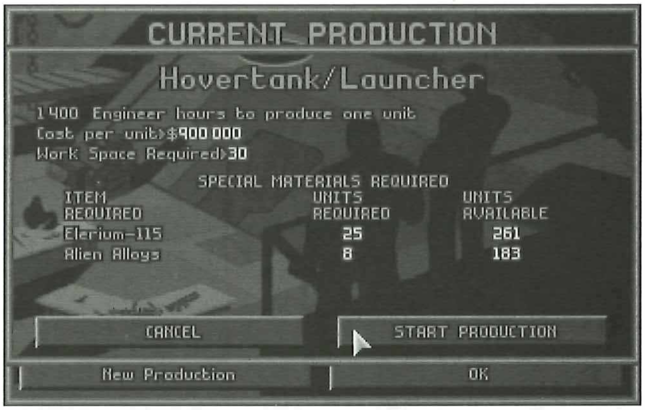
Each new facility you add to a base requires people to work there. That means you have to build living quarters to house the new engineers, soldiers, or scientists. Don't scrimp on living space. It would be a shame, for example, to build a shiny new laboratory but not have anywhere to house the scientists who will work in it.

Laboratories

You begin the game with one laboratory, and you need at least one more, possibly two. Each lab can hold 50 scientists conducting research, and the more scientists you turn loose on a project the faster the research is completed. The 10 scientists with which you begin a game aren't nearly enough to research the items that will quickly become available, so one of your first tasks should be to build a lab for the batch of new scientists you hire. Eventually you'll want between 75 and 100 scientists. A research-intensive strategy requires 100 to 150. Make sure you have enough labs for all of them.

Workshops

All manufacturing takes place in workshops. Each item under production requires a specific amount of workshop space, as detailed in the Start Production window for each item. For example, one hovertank/launcher has a work space requirement of 30 spaces. If you intend to conduct extensive manufacturing, you need at least two workshops and more likely three.



Hovertank/Launcher

1400 Engineer hours to produce one unit
Cost per unit>$900 000
Work Space Required>30

SPECIAL MATERIALS REQUIRED

ITEM REQUIRED	UNITS REQUIRED	UNITS AVAILABLE
Elerium-115	25	261
Alien Alloys	8	183

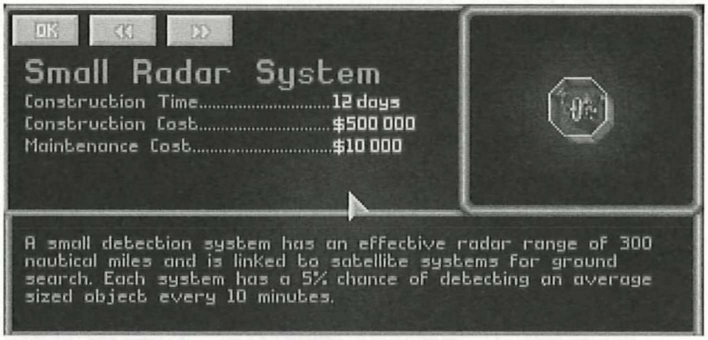
THE INTENSIVE MANUFACTURING STRATEGY

One strategy worth trying is to sacrifice funding from contributing nations in favor of an extremely busy manufacturing schedule. In that case, you'll need four to six workshops and a hefty contingent of engineers to work in them.

Small and Large Radar Systems

Although a small radar system is not especially expensive, it's also not particularly effective. Its 300 nautical mile range is good enough if you have an extensive network of bases, but not if you're relying on it for wide-area coverage.

The large radar system is considerably better than the small one. It covers 450 nautical miles. Unfortunately, it also costs a great deal more and takes twice as long to build. Still, a good strategy is to construct one large radar system with each new base, because once it's in place the detection capabilities of the base will be much stronger.



Small Radar System

Construction Time............12 days

Construction Cost............$500 000

Maintenance Cost............$10 000

A small detection system has an effective radar range of 300 nautical miles and is linked to satellite systems for ground search. Each system has a 5% chance of detecting an average sized object every 10 minutes.

General Stores

Throughout the game, you purchase new equipment and supplies, as well as salvage equipment and materials from defeated aliens. All of it has to be stockpiled in general stores. Your first base has one general store to start with, but you should build another immediately. You'll need it, although you may not need a third. If your strategy is manufacturing-heavy, however, a third general store will definitely be necessary.

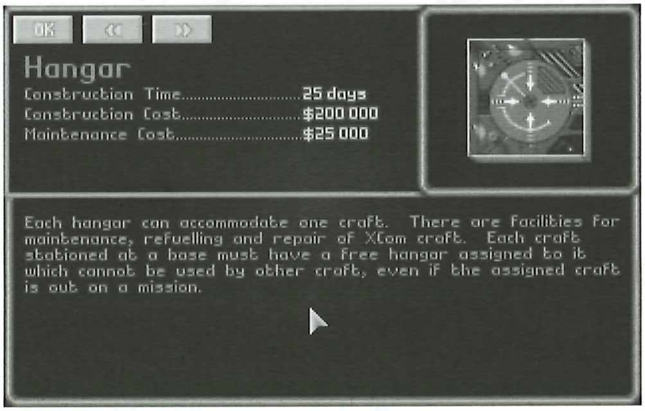
Alien Containment Facilities

Don't wait. Build an alien containment facility at the start of the game. You need one when you capture aliens and bring them back from the battlefield alive. Since the only way to learn everything you need to know is by interrogating (that is, researching) live aliens, you should try to capture them as early in the game as possible. But if you capture them and you don't have an alien containment facility, the alien dies on arrival. Capturing a high-ranking alien only to have him die on you is frustrating, because the information it might have offered is lost for good.

An alien containment facility can hold ten live aliens. If you're extremely good at capturing them, build a second. Once you've researched live aliens, however, they're of no use to you, so you might as well sell them and get your containment space back. They're worth considerable money, too. We can only assume that the buyers will give them a good home....

Hangars

For every aircraft you possess, you need a hangar. In fact, you can't even begin manufacturing or buying aircraft until you have a hangar ready and awaiting its arrival. Having to build the hangar first is unrealistic—it would make more sense for X-COM to gauge when the hangar would be completed and let you start manufacturing the ship to coincide with its completion. But unrealistic or not, you can't acquire aircraft until you have a hangar.



Hangar

Construction Time..............25 days
Construction Cost..............$200 000
Maintenance Cost..............$25 000

Each hangar can accommodate one craft. There are facilities for maintenance, refuelling and repair of XCom craft. Each craft stationed at a base must have a free hangar assigned to it which cannot be used by other craft, even if the assigned craft is out on a mission.

A hangar is a hangar is a hangar. There are no degrees, no better or worse. Just make sure you plan ahead so you have them when you're ready to build aircraft Or, if you're sure of yourself, sell off a craft you already have in order to free an existing hangar. Either way works fine.

NOTE

It takes 25 days to build a hangar, so plan accordingly.

Missile Defenses

You begin the game with missile defenses to protect you from the UFOs that are trying to land near the base. These defenses are okay, but they have only a 50-percent chance of hitting approaching UFOs. If defense is important to you, build laser or plasma defenses instead of missile defenses, as they become available. But before spending the money, keep one thing in mind: If you defeat an alien force that's assaulting

your base, you recoup a significant amount of booty. You might, therefore, consider putting money into combat aircraft instead of defenses. On the other hand, deploy the best defenses money can buy for bases inhabited by research or manufacturing personnel.

Laser Defenses

Once you research laser weapons and other weaponry up to heavy lasers, you can start researching and constructing laser defenses. The purpose of laser defenses, like missile defenses, is to keep aliens from landing near the base and attacking it (which leads to tactical combat in the base itself). Laser defenses cost twice as much as missile defenses, but they're substantially better for defending bases.

Plasma Defenses

Plasma is a great weapon, as any X-COM soldier who's carried around a plasma rifle or heavy plasma weapon can attest. If you want your base to have an excellent chance of surviving a direct alien attack, perform the research necessary to construct plasma defenses. At a 70-percent hit ratio and an excellent defense value, plasma defenses go a long way towards keeping you alive.

Fusion Ball Defenses

As good as plasma defenses are, however, they pale beside fusion ball defenses, also the result of researching alien technology. Usually available only late in the game, fusion ball defenses are well worth constructing if you want a base to be virtually immune to alien assault. If you have a rich but poorly defended manufacturing base, for example, fusion ball defenses will significantly lower the chance of your manufacturing base being destroyed at alien hands.

Grav Shield

If you really want to be sure aliens don't reach your base, fork over an extra $1.2 million for a grav shield (available only after extensive research). This little item works by repelling alien craft just long enough for your defenses to take a second shot. A fusion ball defense coupled with a grav shield is expensive, but practically impenetrable. Perfect for the truly paranoid.

Hyper-Wave Decoder

Late in the game, you'll have a good idea of what kinds of aliens and UFOs you want to capture rather than destroy. You'll also know which kinds you have no further interest in, because you will already have researched different species of alien. The hyper-wave decoder is useful late in the game because it not only detects UFOs, it tells you the type of UFO, the alien species on board, and what kind of activity the UFO is undertaking. At $1.4 million to build and $30,000 to maintain, a decoder is anything but inexpensive. Nevertheless, it can pay for itself instantly if it leads you to the right alien.

BASE DEFENSES COMPARISON TABLE

So you can compare the relative value and strength of each type of defense, I've prepared a base defenses comparison table. It will help you plan the level of defense you want for each base.

	Missile	**Laser**	**Plasma**	**Fusion**
Days to Build	16	24	34	34
Cost to Build	$200,000	$400,000	$600,000	$800,000
Monthly Maintenance	$5,000	$10,000	$12,000	$14,000
Defense Value	500	600	900	1200
Accuracy	50%	60%	70%	80%

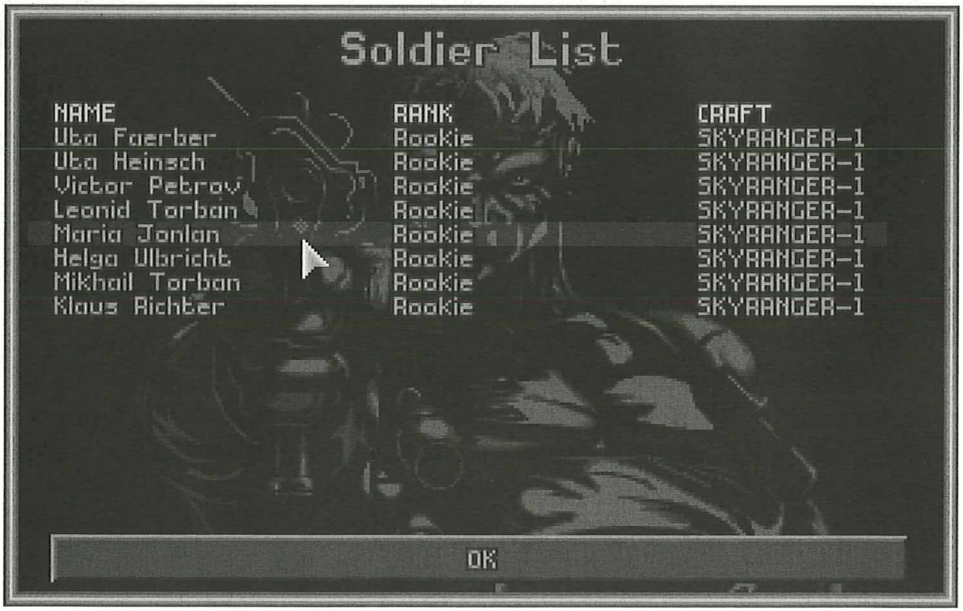
PERSONNEL FOR YOUR BASES

Almost all bases need personnel. Almost all, but not quite. If you want a base for detection or interception only, you don't need to hire personnel at all. Just built the hangars and interceptors, or the detection systems and possibly defense systems, and you'll have a fully functioning base. If you want a base capable of defending itself against alien ground assaults, however, or one that can attack alien sites and conduct research and manufacturing operations, personnel are a requirement. And, like real-life personnel, they're expensive to acquire and expensive to maintain, but you really can't do without them. Just ask any human resources specialist.

SOLDIERS

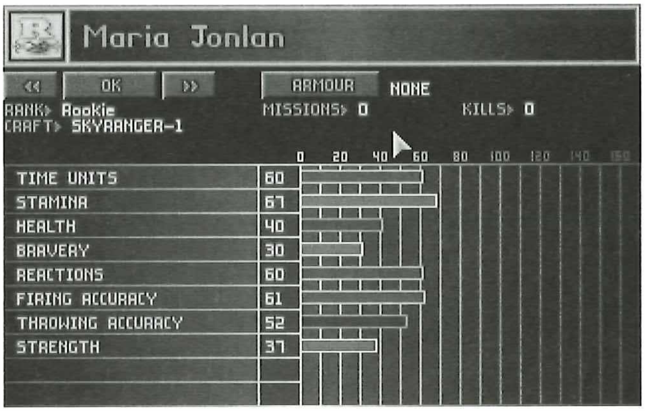
Soldiers carry out battles on the Tactical Display. That's all they do, but it's important. You begin the game with eight soldiers and you should probably add one or two immediately. As discussed in Part Three, three fire teams of three soldiers each is a useful number to take into combat, so adding a soldier to the original eight is a good idea.

Figure 5.3 shows a typical soldier list from early in a game. This list is accessible via the Soldiers button on the Base Display menu.



NAME	RANK	CRAFT
Uta Faerber	Rookie	SKYRANGER-1
Uta Heinsch	Rookie	SKYRANGER-1
Victor Petrov	Rookie	SKYRANGER-1
Leonid Torban	Rookie	SKYRANGER-1
Maria Jonlan	Rookie	SKYRANGER-1
Helga Ulbricht	Rookie	SKYRANGER-1
Mikhail Torban	Rookie	SKYRANGER-1
Klaus Richter	Rookie	SKYRANGER-1

FIGURE 5.3 *The Soldier List at the beginning of a game*



Maria Jonlan

NONE

RANK> Rookie
CRAFT> SKYRANGER-1
MISSIONS> 0
KILLS> 0

TIME UNITS	60
STAMINA	67
HEALTH	40
BRAVERY	30
REACTIONS	60
FIRING ACCURACY	61
THROWING ACCURACY	52
STRENGTH	37

All these soldiers are Rookies. To become useful, they need to complete a few combat missions. At the end of successful missions, Rookies can be promoted to a higher rank. Rookies are promoted to Squaddies as soon as they gain some actual combat experience, such as firing a weapon at an alien. Also at the end of missions, their abilities improve. This graph shows the beginning abilities of a Rookie named Maria Jonlan. This graph is accessible from the Tactical Display, as discussed in Chapter 3.

At the very beginning of the game, call up the Soldiers screen from the Base Display and decide which soldiers to keep and which to sack. Early on, high levels of accuracy and bravery are extremely nice to have, and time units are far less important. On the other hand, accuracy is improved quite easily as soldiers fire and throw successfully during a mission, so accuracy skills might be worth foregoing early on.

NOTE

Soldiers named Maria seem to be particularly good in X-COM. Could this be a design preference? Hmmm...

Obviously, every ability is important, but make choices according to the type of battles you wish to conduct. Fast, powerful soldiers with exceptional health, bravery, and weapons skills are the ideal, but they just don't come that way. Many skills have to be acquired in battle.

Soldiers cost $40,000 to recruit. As such, they're relatively cheap. Even so, if you don't keep them alive they won't improve their skills and become useful to you later. One strategy for getting a good collection of soldiers is to hire a number of Rookies and let them take out the aliens by sheer force of numbers. Another strategy is to assemble a much smaller team and let them develop their abilities actively with each mission. The only problem with the latter strategy is that losing an experienced, highly skilled soldier is very close to heartbreaking. If you're choosing this strategy, save the tactical mission frequently so you can try again.

GET TO KNOW YOUR SOLDIERS

Soldiers in X-COM represent the game's role-playing component. No other personnel have individual statistics or names. To make X-COM a satisfying and rewarding experience, spend some time getting to know your soldiers. You can even rename them to suit your tastes by clicking in the name field of the Soldier Abilities display. You'll quickly find yourself cheering on your squad, soldier by soldier, as it makes its way through the Battlescape. In a game so heavily focused on global strategy, a concern for individual soldiers can make a very real difference in enjoyment.

SCIENTISTS

Scientists cost $60,000 to recruit but are worth every penny, especially in the early and middle periods of the game. There are no Einsteins or Bohrs or Turings or anything like that. Every scientist is as good as every other scientist, and all that matters is numbers (an extremely flawed reflection of reality, but no matter...). The simple rule is: Hire lots of 'em, and build the laboratory space they need.

TIP

Early in the game you need scientists to complete research quickly, but late in the game, as research opportunities decrease, you can start laying them off to save maintenance costs.

ENGINEERS

Engineers are like scientists in X-COM—they are faceless, nameless, and good only in numbers (hmmm... more realistic, perhaps?). Hire a bunch early, and build the workshops they need to manufacture. You can't do any manufacturing without engineers, and the more you have, the faster things get manufactured.

TIP

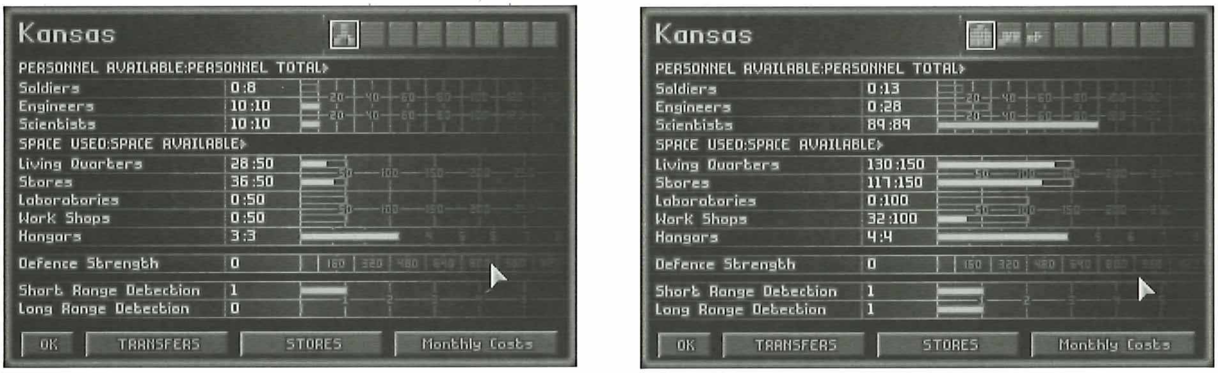
Since manufacturing is a key component of all X-COM strategies (see Chapter 6), don't scrimp on engineers.

CHARTING YOUR PROGRESS

You can play through an entire game of X-COM without ever looking at the Base Information chart offered through the Base Display. But this chart can be useful, especially when you're considering expansions or strategy adjustments. The chart simply lets you know what you have on a base and how much it's all costing you. It gives you an idea of your base's full potential should you choose to further its development.

THE BASE INFORMATION CHART

Figure 5.4 shows a Base Information chart at the beginning of a game and a chart for the same base late in a game.



Kansas

PERSONNEL AVAILABLE:PERSONNEL TOTAL
Soldiers 0:8
Engineers 10:10
Scientists 10:10
SPACE USED:SPACE AVAILABLE
Living Quarters 28:50
Stores 36:50
Laboratories 0:50
Work Shops 0:50
Hangars 3:3
Defence Strength 0
Short Range Detection 1
Long Range Detection 0

Kansas

PERSONNEL AVAILABLE:PERSONNEL TOTAL
Soldiers 0:13
Engineers 0:28
Scientists 89:89
SPACE USED:SPACE AVAILABLE
Living Quarters 130:150
Stores 117:150
Laboratories 0:100
Work Shops 32:100
Hangars 4:4
Defence Strength 0
Short Range Detection 1
Long Range Detection 1

FIGURE 5.4 *A Base Information chart at the start of a game (left) and late in a game (right)*

Obviously they look very similar, but bars for items like living quarters, scientists, and other facilities are longer late in the game. Notice that almost no attention has been given to defenses on this base. The bar is barely above zero, and has room to grow to a figure of 1200 (with a fusion ball defense). This is the kind of thing that looking at the Base Information chart can show you in a glance.

Transfers

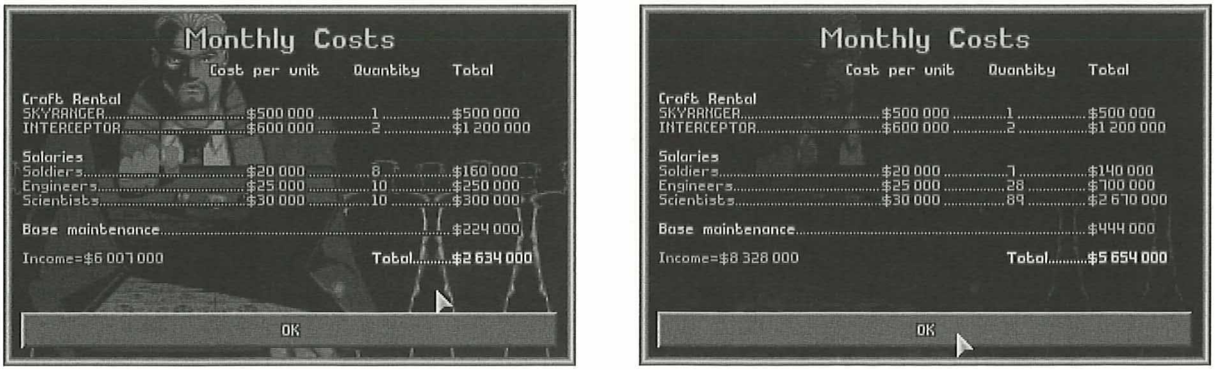
By clicking the Transfers button on the Base Information chart, you can see which items are being transferred to your base. Transfers you initiated through the Transfer procedure from the Base Display are included on the chart, as are items you've purchased or personnel you've hired that have not arrived yet. Check here if you need to know precisely when people and things will get to your base.

Stores

Although hardly a necessary item—the information is available through the Sell/Sack window from the Base Display—the Stores display shows you precisely what you have in stock. Give the Stores button a click on the Base Information chart to see exactly what you have on hand.

Monthly Costs

At the end of every month, you get money from the nations who are funding X-COM. Unfortunately, some of the money goes immediately to maintain your personnel, equipment, and facilities. Click the Monthly Costs button on the Base Information chart to see a Monthly Costs chart showing how much you're spending on aircraft, salaries, and facilities. Figure 5.5 shows a Monthly Costs chart from early in a game and one from late in a game.



Monthly Costs

	Cost per unit	Quantity	Total
Craft Rental			
SKYRANGER	$500 000	1	$500 000
INTERCEPTOR	$600 000	2	$1 200 000
Salaries			
Soldiers	$20 000	8	$160 000
Engineers	$25 000	10	$250 000
Scientists	$30 000	10	$300 000
Base maintenance			$224 000

Income=$6 007 000

Total $2 634 000

Monthly Costs

	Cost per unit	Quantity	Total
Craft Rental			
SKYRANGER	$500 000	1	$500 000
INTERCEPTOR	$600 000	2	$1 200 000
Salaries			
Soldiers	$20 000	7	$140 000
Engineers	$25 000	28	$700 000
Scientists	$30 000	89	$2 670 000
Base maintenance			$444 000

Income=$8 328 000

Total $5 654 000

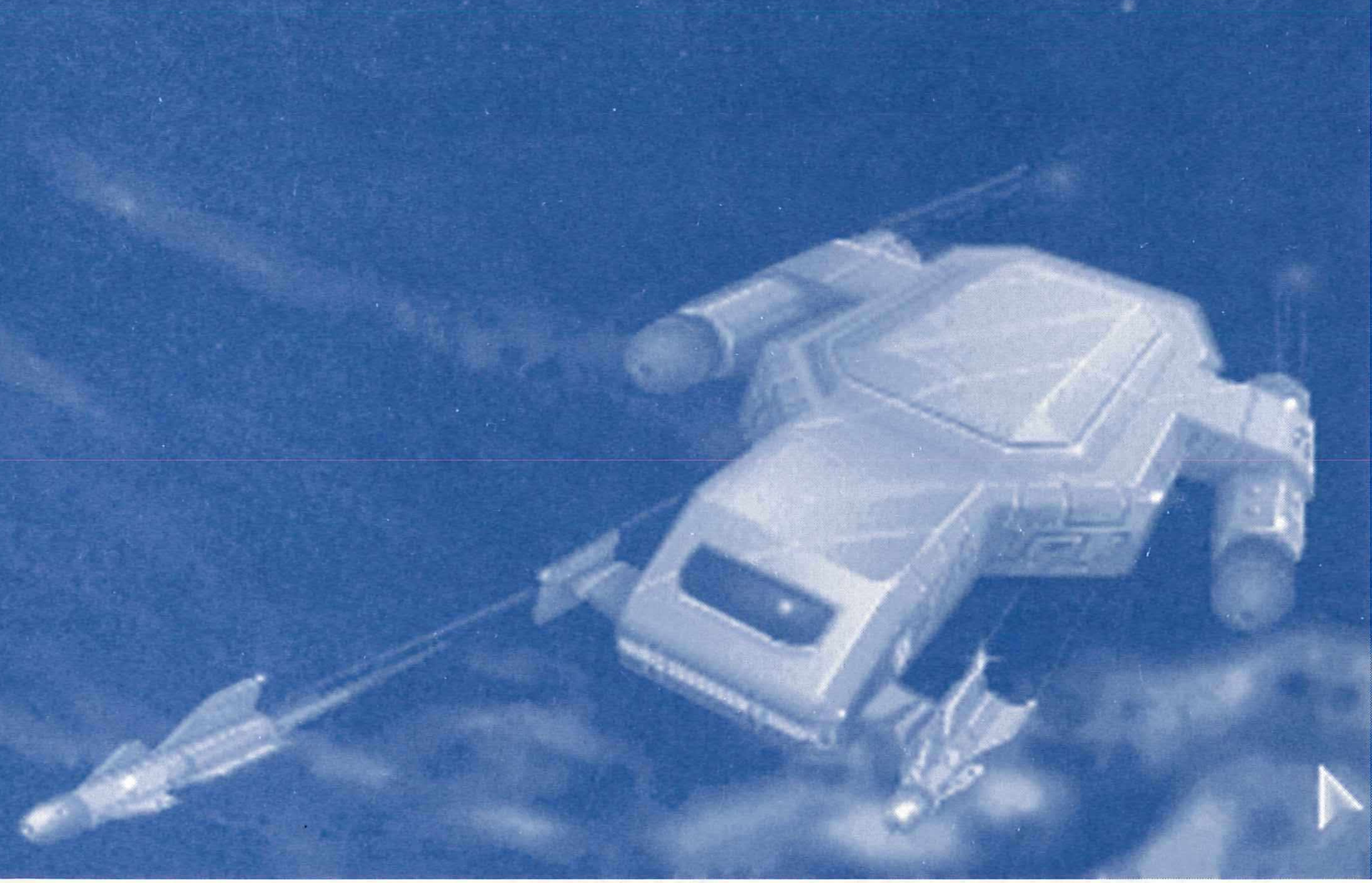
FIGURE 5.5 *Monthly Costs chart early in a game (left) and late in a game (right)*

CUT DOWN YOUR EXPENSES

As any employer can tell you, salaries represent the lion's share of maintenance expenses. That's why it's important to dismiss (sack) soldiers, scientists, or engineers you no longer need. Once you've manufactured your own craft, you should also consider selling the Skyranger and Interceptors you started with to cut monthly costs even further.

MANAGING YOUR BASES: A CHECKLIST

☐ Hire scientists and engineers immediately.
☐ Build a laboratory and a workshop almost immediately.
☐ Build an alien containment facility almost immediately.
☐ Build a new base near the beginning of the game.
☐ Work towards a total of 3–7 bases.
☐ Define functions for each base: interception, detection, research, etc.
☐ Place new bases to complement your existing bases and build a ring of protection around the earth.
☐ Determine the desired defensive abilities of each base individually.
☐ Watch your monthly costs.



CHAPTER SIX

RESEARCH AND MANUFACTURING

No matter how many UFOs you shoot down or aliens you destroy, you cannot win at X-COM without a solid grasp of the research and manufacturing components of the game. And make no mistake—"cannot win" means exactly that. As you'll learn in Part Four, an end to the game is attainable only by researching one item and manufacturing another. And the only way to accomplish that is through careful and relentless research and manufacturing.

To learn the actual mechanics of conducting research or manufacturing projects, see Chapter 2. Here, we'll examine the strategies and special techniques involved in researching and manufacturing weapons, aircraft, armor, and other items.

KEY RESEARCH STRATEGIES

As far as research strategies are concerned, only three major strategies need be mentioned.

First, hire as many scientists as you can afford, as early as possible in the game. You begin with ten, but ten scientists is laughable if you intend to do any serious research. Increase to twenty immediately, and add five or ten more at every opportunity until you reach fifty, the maximum your initial laboratory can hold. Then build a new lab and hire twenty-five to fifty more scientists.

TIP

There's no need to build labs at bases other than your home base, unless your home base is in danger of being captured by alien troops.

Second, assign all your scientists to the same research project at the same time. Splitting them up gets more projects going, but makes the projects take longer to complete. Late in the

game, when you're doing "easy" research—on alien corpses, on lower-tech weaponry you've passed over, etc.—you can split scientists up to good effect. However, for difficult research—and this means everything from laser weapons early in the game through plasma and fusion technologies later on—have scientists conduct research in one large group.

Finally, start researching as soon as the game starts, and continue project by project, nonstop, until all possible research has been completed. After you've taken out a few landing sites, especially intact ones, you'll have gobs of material to research. As you complete one research project, others often present themselves automatically as a result of what your scientists have learned (research breeds research). Soon, you'll have an overwhelming number of items to research.

When there's a lot of research to do, the function of the rest of the base is essentially to give the scientists enough time to complete their research. In other words, air strategies, ground battles, and manufacturing concerns will take place solely to keep research alive. Research speed becomes crucial, and you might wish to add more scientists and lab space at the expense of other facilities and activities.

RESEARCH 101

To sum up, here are the three key research strategies:

1. Hire as many scientists as you possibly can early in the game and build new labs for them to work in.
2. Assign all your scientists to the same research project at the same time at the start of the game. Only split them up for easy research projects, like examining alien corpses.
3. Start researching as soon as the game starts and don't let up.

WHAT TO RESEARCH

At the beginning of the game, only three items are available for research: laser weapons, motion scanners, and medi-kits. Assign all your scientists to laser weapons and forget the other two. You need better weapons than the measly little pistols and rifles you start the game with.

TIP

Research laser weapons right off the bat. You need good weapons to win this game.

LASERS

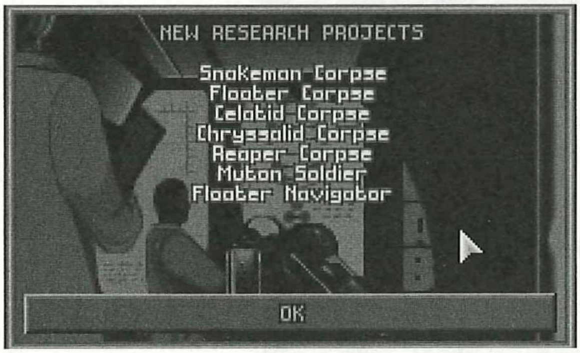
Soon, laser weapons research will yield related items to research. In order, these items are the laser pistol, laser rifle, heavy laser, and laser defense. Research laser pistols quickly to earn the opportunity to manufacture laser rifles. Research heavy lasers only if nothing more interesting has shown up, and laser defenses only if you're working a strategy that concentrates on base defenses (not recommended for the home base).

ALLOYS AND PLASMA

As soon as you shoot down your first UFO and win the battle at the landing site, you get more materials to research. The minute alien alloys are available for research, research them (unless you haven't finished with laser rifles). Alien alloys are the basis of a seemingly unending series of research and manufacturing opportunities.

Research plasma as soon as you can, and then research all the plasma items that present themselves. Your goal here is to manufacture two key items, personal armor and heavy plasma weapons. With those in place, your squads are much more powerful. Research the small launcher and the stun bomb as soon as you can, too. You have to stun aliens in order to capture them. You want to capture aliens, of course, so you can research them as well.

ALIENS

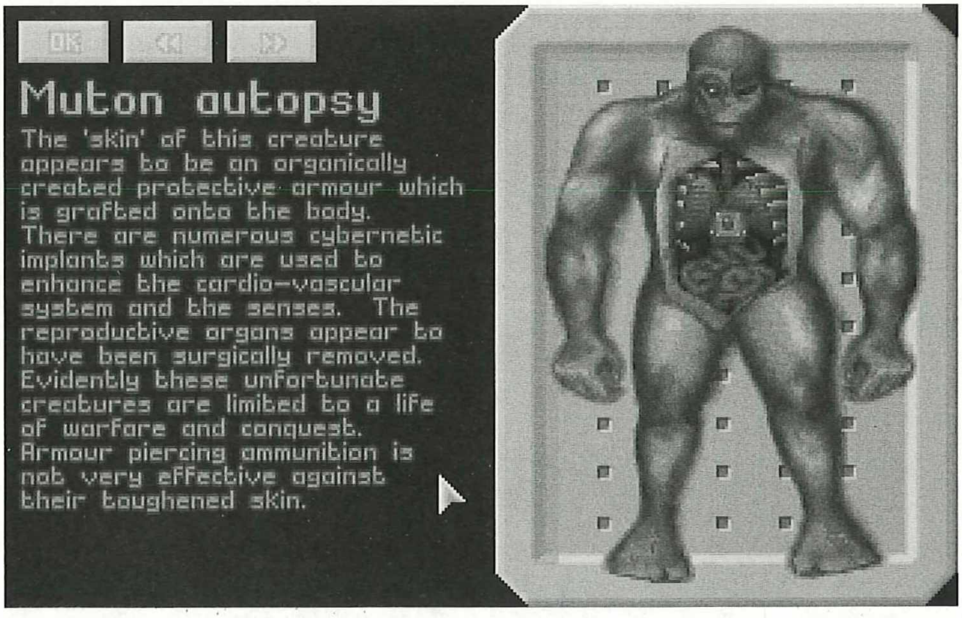


NEW RESEARCH PROJECTS

Snakeman Corpse
Floater Corpse
Celatid Corpse
Chryssalid Corpse
Reaper Corpse
Muton Soldier
Floater Navigator

When your troops bring aliens back from a site, research them as soon as you have time. Captured aliens come first in this scheme, because they can provide information about their species. You can also interrogate them for important information about the alien invasion. Dead aliens are listed as corpses (the top five aliens in the graphic), and live ones have their function listed along with the species (the last two aliens).

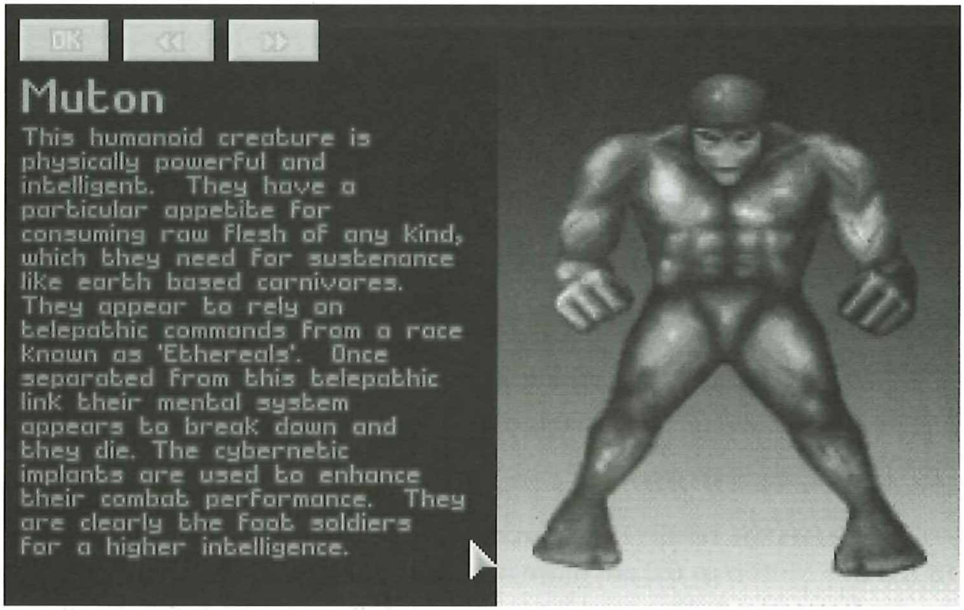
Figures 6.1, 6.2, and 6.3 show the three possible results of researching alien beings. Figure 6.1 displays research on a Muton corpse, and 6.2 shows the results of research on a live Muton soldier. The results on the live Muton in 6.2 are more useful and more certain than those of the dead one in 6.1. You get a better basis for understanding the nature of the alien invasion from a live alien.



Muton autopsy

The 'skin' of this creature appears to be an organically created protective armour which is grafted onto the body. There are numerous cybernetic implants which are used to enhance the cardio-vascular system and the senses. The reproductive organs appear to have been surgically removed. Evidently these unfortunate creatures are limited to a life of warfare and conquest. Armour piercing ammunition is not very effective against their toughened skin.

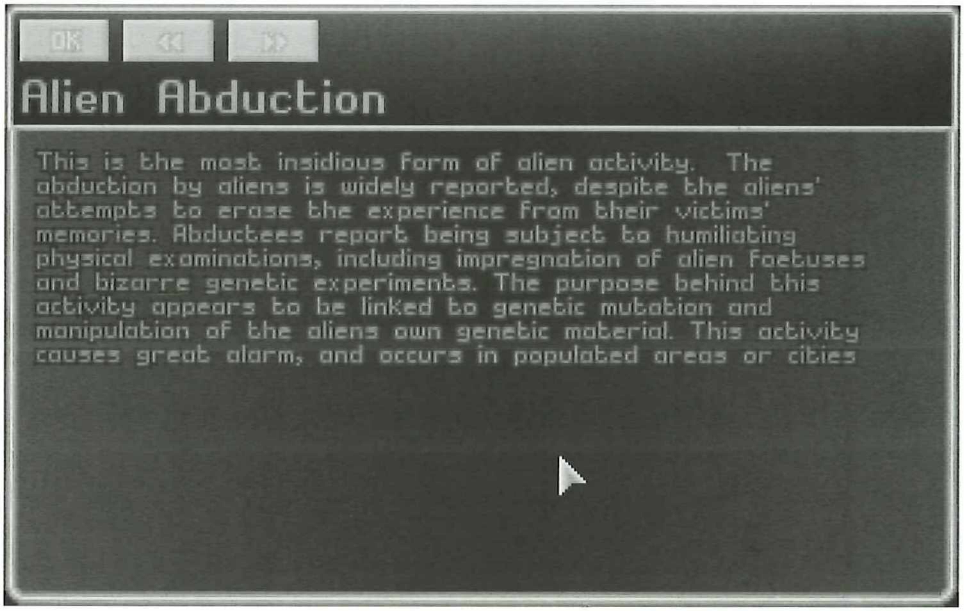
FIGURE 6.1 *Results of researching an alien corpse*



Muton

This humanoid creature is physically powerful and intelligent. They have a particular appetite for consuming raw flesh of any kind, which they need for sustenance like earth based carnivores. They appear to rely on telepathic commands from a race known as 'Ethereals'. Once separated from this telepathic link their mental system appears to break down and they die. The cybernetic implants are used to enhance their combat performance. They are clearly the foot soldiers for a higher intelligence.

FIGURE 6.2 *Results of researching a live alien*



Alien Abduction

This is the most insidious form of alien activity. The abduction by aliens is widely reported, despite the aliens' attempts to erase the experience from their victims' memories. Abductees report being subject to humiliating physical examinations, including impregnation of alien foetuses and bizarre genetic experiments. The purpose behind this activity appears to be linked to genetic mutation and manipulation of the aliens own genetic material. This activity causes great alarm, and occurs in populated areas or cities

FIGURE 6.3 *Results of interrogating a captured alien*

Figure 6.3 shows the results of another kind of research, interrogation. Interrogation is automatically conducted whenever you capture an alien. Although this particular screen does not show it, only through interrogation can you find the ultimate solution to the alien crisis and give yourself a chance of winning the game.

NOTE

See Chapter 9 for a detailed discussion of the different alien species.

AIRCRAFT

Through a series of research projects, you'll eventually get the opportunity to research specific types of alien craft. As soon as you can, research alien craft in order, because the information you gain will help you build the Avenger. As Part Four demonstrates, *you need an Avenger to win this game.* Research it and then build it as quickly as you can.

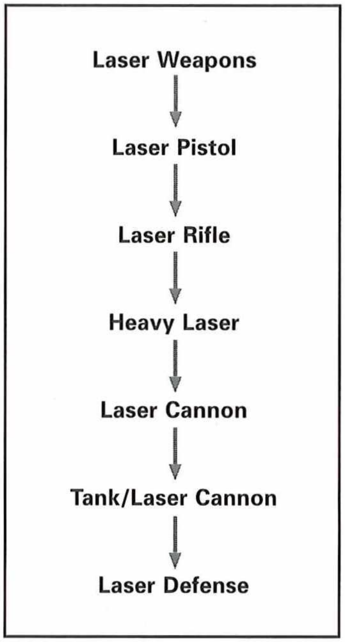
NO RESEARCH IS BAD RESEARCH

While waiting for good research opportunities, research whatever comes along. There's no such thing as bad research, and since you're paying scientists' salaries anyway, make sure they're working. If you're not conducting research, you're doing something wrong.

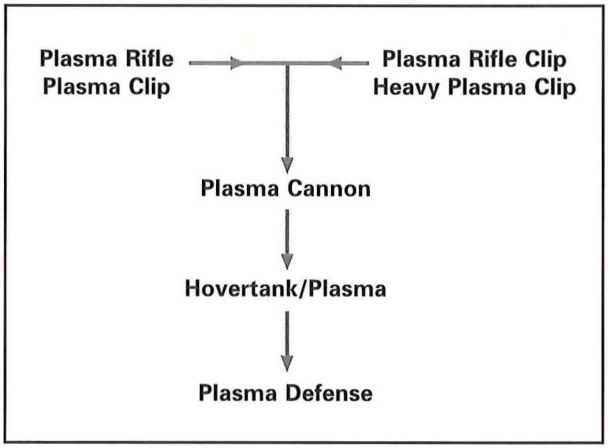
THE RESEARCH CHARTS

The following charts show the "lines" of research you can conduct over the course of the game. Not everything is included here. Missing are items such as the medi-kit that offers no further research opportunities. Use the charts to help see where your research is headed and how developing one line of research can be crucial to fulfilling a strategy. Note also that some of the "lines" overlap (see "Armor and Aircraft," for example).

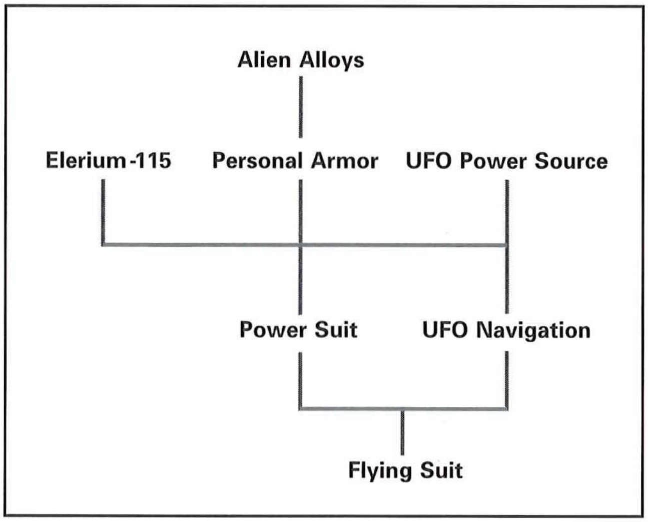
Laser Weapons


Laser Weapons
Laser Pistol
Laser Rifle
Heavy Laser
Laser Cannon
Tank/Laser Cannon
Laser Defense

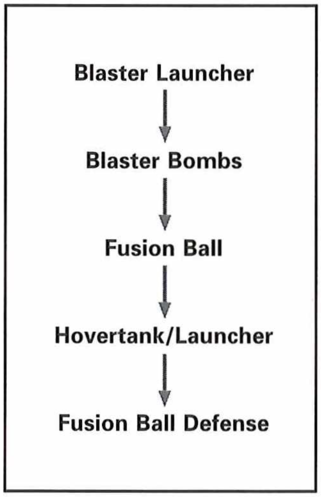
Plasma Weapons


Plasma Rifle
Plasma Clip
Plasma Rifle Clip
Heavy Plasma Clip
Plasma Cannon
Hovertank/Plasma
Plasma Defense

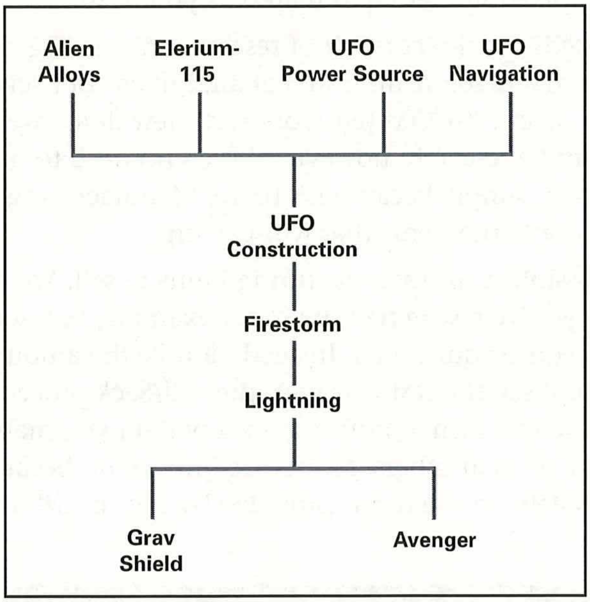
Armor


Alien Alloys
Elerium-115
Personal Armor
UFO Power Source
Power Suit
UFO Navigation
Flying Suit

Blasters and Fusion Weapons


Blaster Launcher
Blaster Bombs
Fusion Ball
Hovertank/Launcher
Fusion Ball Defense

Aircraft


Alien Alloys
Elerium-115
UFO Power Source
UFO Navigation
UFO Construction
Firestorm
Lightning
Grav Shield
Avenger

Captured Aliens

Any Alien → Alien Origins

Medic → Information about that species

Navigator → Hyper-Ware Decoder

Any Ethereal → Psionic Laboratory - Mind Shield and Psi Amp

Sectoid Leader → Psionic Laboratory - Mind Shield and Psi Amp

Leader → The Martian Solution

Commander → Cydonia or Bust (to the final mission)

KEY MANUFACTURING STRATEGIES

The rule for scientists applies to engineers as well: Have them work together. Build an additional workshop on your initial base and hire enough engineers to fill both the first workshop and the new one. Then start producing the equipment and materials you need.

Manufacturing is the direct result of research. At the beginning of the game, you can't manufacture anything at all. But as your scientists complete research projects, X-COM tells you what new items are available for manufacture. Unlike research, however, there's no need to manufacture everything you can simply because it's there. Manufacturing costs money, so select only the items that will pay off.

As soon as possible, start manufacturing items to sell. You'll want laser rifles as soon as you've researched them, for example, but don't just produce enough to equip your squad. Instead, double the amount, give half to your squad, and sell the rest (through the Sell/Sack procedure outlined in Chapter 2). You can turn a profit with every item you manufacture, some items more so than others. Profits are important, because you can't win at X-COM solely on the funds provided by the contributing nations.

BASIC MANUFACTURING

Here are the key manufacturing strategies:

1. Have all engineers work on the same manufacturing project.
2. Build an additional workshop on your first base and hire enough engineers to fill both the first workshop and the new one.
3. As soon as possible, start manufacturing items to sell.

WHAT TO MANUFACTURE

Once you're ready to start manufacturing, the question is, "What should you manufacture?" Here are the answers.

LASER AND PLASMA WEAPONS

Initially, you need weapons for your squad. When laser pistols become available, manufacture a number of them and put them in the Skyranger

to help the troops defend themselves until laser rifles arrive. As soon as laser rifles can be manufactured, turn your attention to them and produce at least double what you need. Put enough on the Skyranger to equip each soldier, sell the laser pistols (along with normal pistols and rifles) for profit, and sell the remainder of the laser rifles as well (you'll make a reasonable buck). Then go back to manufacturing laser pistols, because they cost little and turn a very healthy profit (see the Manufacturing Profits table later in this chapter).

As research allows, manufacture plasma weapons (rifles and heavy plasma particularly) and personal armor.

ALIEN ALLOYS

Manufacture alien alloys, because you'll usually need more than you find. However, it's best to salvage some of the alien items in order to save money. Heavy weapons clips, for example, are cheaper to salvage than to manufacture.

TIP

The only way to get Elerium-115 is to assault an intact landing site or base. Go for it! You need Elerium-115.

Elerium-115, an essential ingredient for many alien-related items manufactured in the game, is in scarce supply and cannot be manufactured. For this reason, you should assault intact landing sites and bases as often as possible, because you need Elerium-115 for a wide range of items.

SELLING GUNS ON THE SLY!

As the game goes on, much of the material you manufacture will be for resale, not for use. Check the Sell/Sack list for sale prices, and manufacture the items that will profit you the most.

By the way, you don't have to complete a manufacturing assignment before realizing profit. Suppose you decide to manufacture and sell 100 laser pistols, but after manufacturing 50 you realize you need other weapons instead. Just pull engineers off their laser pistol assignment and reassign them to other weapons. On the Sell/Sack list, you'll see 50 laser pistols, not 100, for sale.

AVENGER AIRCRAFT

Flying suits are extremely useful and should be a consideration when they become available. Similarly, manufacture an Avenger aircraft, using every engineer you have, as soon as you have the materials and the technology. Not only do you need the Avenger to end the game, it helps immensely in staving off UFO hordes until you have everything in place.

MANUFACTURING PROFITS TABLE

This table shows some of the items you can manufacturer in X-COM, what they cost, and what they sell for. By carefully managing your manufacturing arm, you can make sizable profits and put them to use building bases and acquiring advanced weaponry. Once you start doing that, you can make even higher profits.

Item	Cost Price	Selling Price
Laser Pistol	$8,000	$20,000
Laser Rifle	$20,000	$37,000
Heavy Laser	$32,000	$61,000
Plasma Pistol	$56,000	$84,000
Plasma Rifle	$88,000	$127,000
Heavy Plasma Clip	$122,000	$172,000
Alien Grenade	$6,700	$15,000
Small Launcher	$7,800	$12,000
Stun Bomb	$7,000	$15,000
Blaster Launcher	$90,000	$144,000
Blaster Bomb	$8,000	$17,000

SHOULD YOU SPREAD RESEARCH AND MANUFACTURING BASES AROUND?

Depending on your strategy, you might consider establishing research and/or manufacturing concerns on many different bases. Doing so requires a substantial investment of money and time, but at least if one base is invaded and knocked out, the others can continue researching and manufacturing. Another benefit of having several bases is that space

limitations put a cap on the number of science and manufacturing activities that can be done at one base. So if you're doing a lot of research and manufacturing, you might have no choice but to build a lot of research and manufacturing facilities on different bases.

TIP

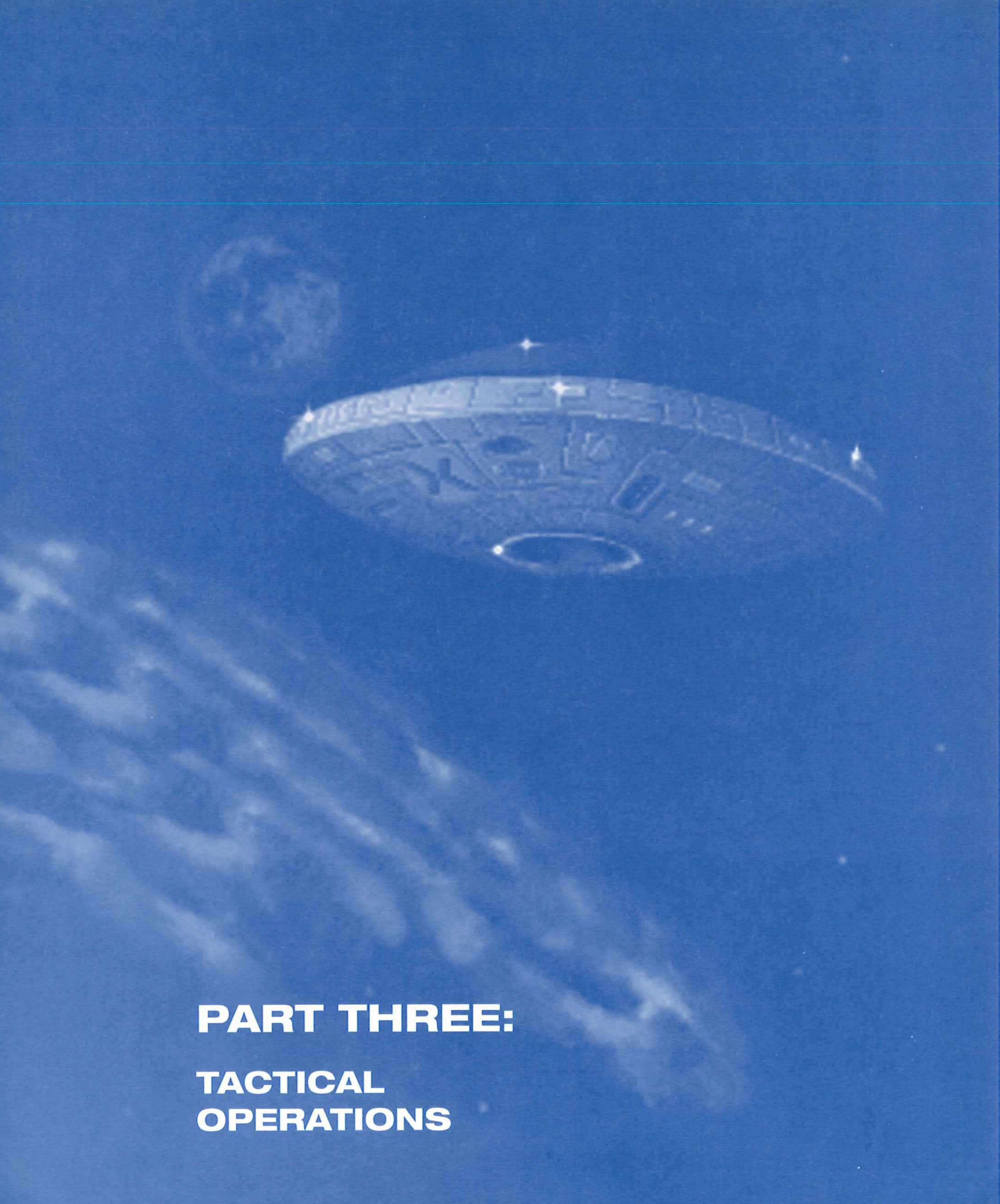
Once you've developed the ability to manufacture items at one base, any base with the appropriate materials can perform the manufacturing. You don't have to research each item at each base.

One problem with this approach, however, is that scientists and engineers are split up and they can't all go to work on the same project. Another is that, unless you develop a second powerful squad, you have to transport material such as alien alloys and Elerium-115 from one base to the other.

The choice is yours, obviously. In general, however, one substantial research and manufacturing base is sufficient.

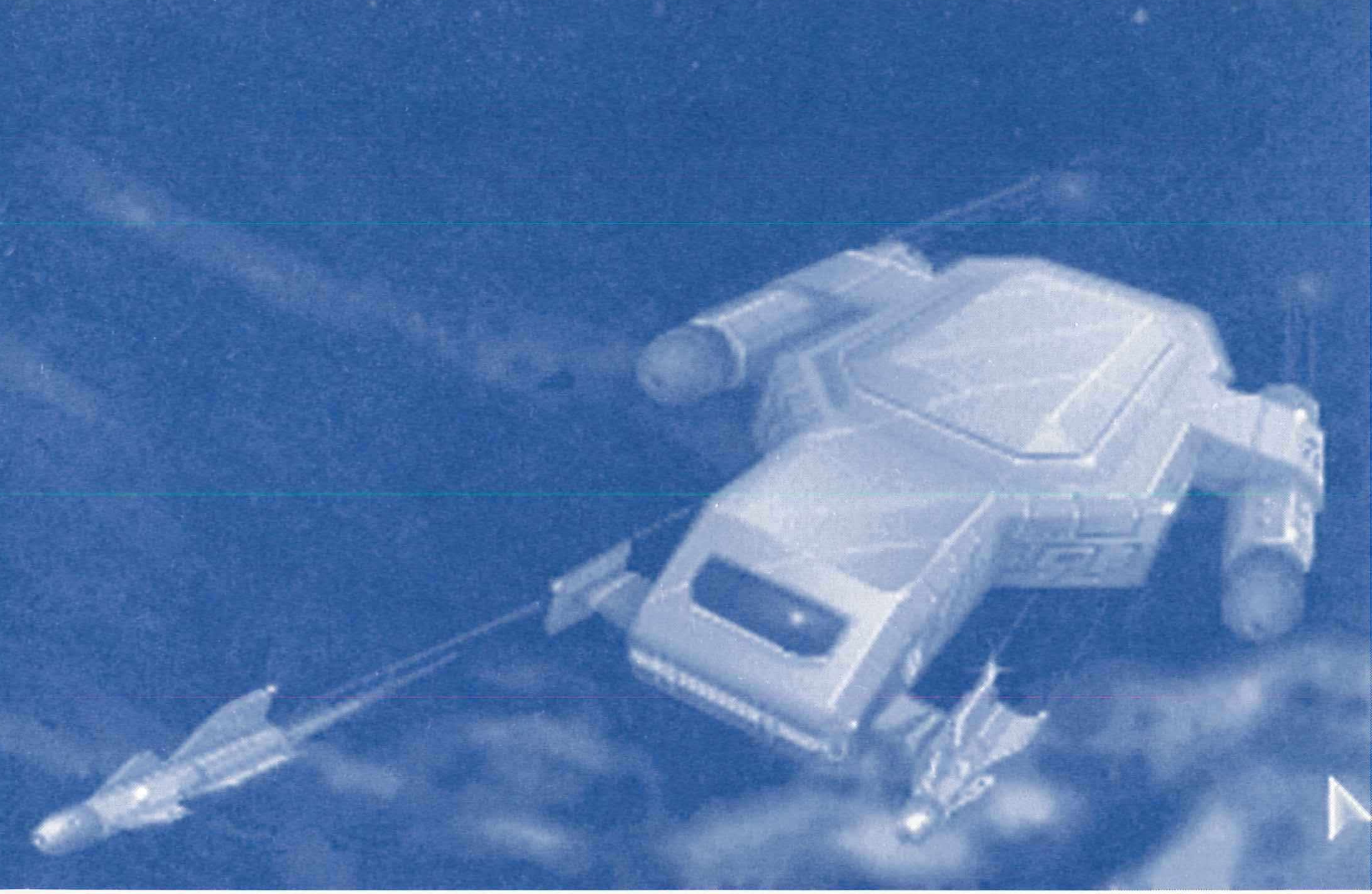
RESEARCH AND MANUFACTURING: A CHECKLIST

- ☐ Hire additional scientists and engineers.
- ☐ Have your scientists work on one project only.
- ☐ Manufacture one item at a time to finish as quickly as possible.
- ☐ Research and manufacture laser weapons immediately.
- ☐ Research and manufacture personal armor as soon as possible.
- ☐ Research all items as soon as they're available.
- ☐ Give research priority to alien items over standard items.
- ☐ Give top priority to researching captured aliens.
- ☐ Conduct research on the Avenger aircraft as soon as possible, then manufacture it.
- ☐ Manufacture for profit as well as use, establishing a full production-for-profit arm.
- ☐ Sell manufactured items you can't use yourself.



PART THREE:

TACTICAL OPERATIONS



CHAPTER SEVEN

GETTING PREPARED TO MEET THE ENEMY

Unless you shoot down every UFO over water, you're going to spend a large part of your X-COM playing time engaged in tactical combat. So large a part, in fact, that open forums on CompuServe, GEnie, and America Online often have complaints about the amount of time spent in tactical combat. X-COM is billed as a strategy game, but at least 75 percent of the time, and maybe closer to 90 percent, is spent on the battleground. But criticism or not, it's a given, so if you're going to master X-COM you'd better master the tactical portion.

And make no mistake: This is a superb tactical system. The same people who go online to criticize the amount of time spent in battle also praise the battle system to the skies. In fact, it might well be the best battle system that computer gaming has ever seen. It works well, offers strong realism, and gives you exactly the right degree of control over your soldiers.

KEEPING YOUR HEAD IN BATTLE

In tactical combat, you move each soldier across the battleground, searching for aliens and destroying or capturing them. That's it—there's nothing more to it. It's extremely important to keep that focus in mind. Don't waste time searching for items to carry back with you. Once you wipe out all the aliens, the X-COM game takes care of salvaging items and corpses for you.

In some cases, you search for specific aliens to capture. If you're trying to capture an alien, you need special equipment. Once the operation is in place it's important—once again—to keep your objectives in mind. It's far too easy to get carried away with simply killing every alien in your path. In the early battles, this is the right idea, but later you'll have more important fish—uh, Mutons—to fry.

NOTE

See Chapter 6 for details on which aliens yield which research results, and See Chapter 10 for information on what aliens you need to solve the game.

GIVING SOLDIERS THE RIGHT EQUIPMENT

All the tactics in the world can't replace the right piece of equipment. If the situation calls for a grenade, make sure a grenade is available. If it calls for a stun bomb, make sure you have the launcher to go with it. And so on, all down the line.

EQUIPMENT PLANNING AT THE BASE

Equipment planning matters. In fact, it matters a huge amount. Equipment planning begins at the base when you outfit the transport in the first place and continues once you land at the site. But what transpires at the base is most important.

From the start of the game, make sure the transport ship is carrying good equipment. Give each soldier a good weapon or two, and stock the transport with the best weapons you can buy or manufacture. *Be absolutely sure* to include ammunition for the weapons. Include grenades and high explosives if you intend to use them (you should, especially early in the game), and consider taking smoke grenades as a means of masking your movements across the terrain. And take along at least two stun rods, because they will help you capture aliens. Remember, researching a live alien is much more productive than researching a corpse.

SQUAD WEAPONS CHECKLIST

- ☐ A good weapon or two
- ☐ Ammunition for the weapons
- ☐ Grenades and high explosives (you need them early in the game)
- ☐ Smoke grenades (for masking your movements across the terrain)
- ☐ At least two stun rods (for capturing aliens)

From the beginning of the game, purchase a tank/cannon and some ammo (at least 30 rounds). When the tank is ready, load it onto the Skyranger. If it won't fit (a window will tell you if you're overloaded), unload other equipment until it does. If you detect an alien ship and the tank isn't ready, try very hard to shoot it down over water, where you won't have to assault it. The tank, early on, will save a great many soldiers' lives.

NOTE

Purchasing and recruiting equipment is discussed in Chapter 2.

As the game progresses, continue upgrading the squad's equipment. Unload pistols in favor of rifles, and then rifles in favor of a laser weapon. Laser rifles should become a squad staple as early as possible, to be replaced by plasma weapons, especially the heavy plasma, as soon as these weapons becomes available. Tanks, too, should be upgraded. Retire the cannon/tank you buy right off the bat in favor of a laser tank as soon as possible. Consider buying two for added safety.

And don't forget the other items—proximity grenades, stun rods, electro-flares, and so forth. Check your UFOpaedia to see what each one does (the UFOpaedia is an invaluable source for equipment planning).

TIP

Check the UFOpaedia often. It is a good source for weapons planning.

WHAT YOU TAKE DEPENDS ON YOUR STRATEGY

A great deal about what you bring to the field of battle depends on the strategy you intend to use. An aggressive strategy requires high explosives, grenades, and top-quality firearms. A cautious strategy can make better use of proximity grenades, firearms, and a tank or two to hide behind.

EQUIPMENT PLANNING AT THE SITE

The first part of every tactical mission involves giving soldiers the equipment they need, a task you perform through the Equip Soldier screen shown in Figure 7.1.

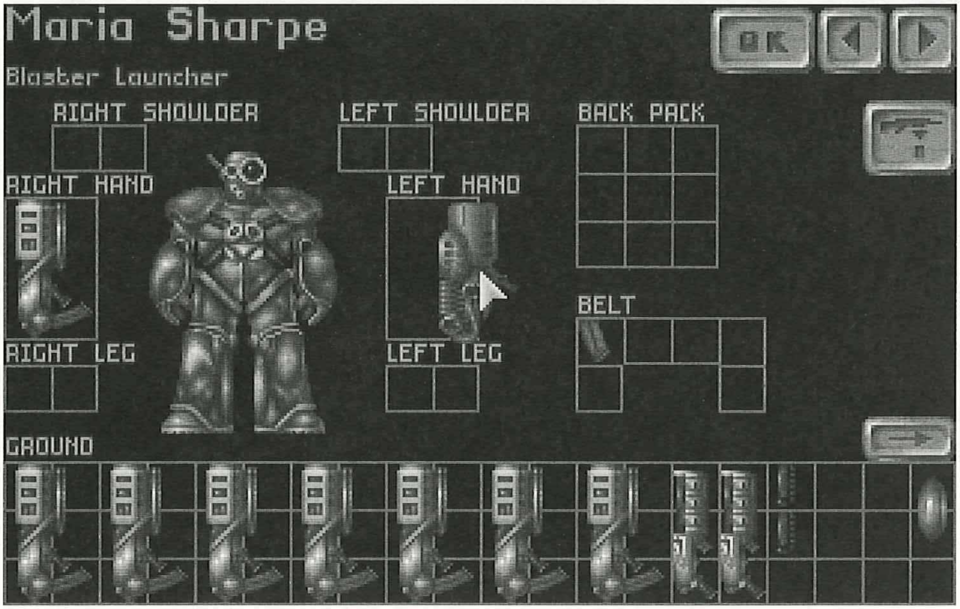

Maria Sharpe
Blaster Launcher
OK
RIGHT SHOULDER
LEFT SHOULDER
BACK PACK
RIGHT HAND
LEFT HAND
BELT
RIGHT LEG
LEFT LEG
GROUND

FIGURE 7.1 *The Equip Soldier screen*

This screen, from very late in a game, shows a fully armored soldier and a host of weaponry in the weapons cache below. She's already carrying a heavy laser weapon, and your task is to give her anything else she needs, in this case to defend her home base from an alien assault. A blaster launcher is about to be placed in her left hand. She'll need two or three blaster bombs to go with the launcher.

Figure 7.2 shows an Equip Soldier screen from very early in a game, the first mission in fact. This soldier is equipped with a rifle (his pistol was sold off because pistols are fundamentally useless). A stun rod is being placed in his left hand. The stun rod lowers his rifle accuracy somewhat, but it will be worth its weight in gold if it can help capture a useful alien. The soldier will leave three electro-flares behind because the mission is taking place during daylight. The rifle clip and two grenades in his belt will stay right where they are.

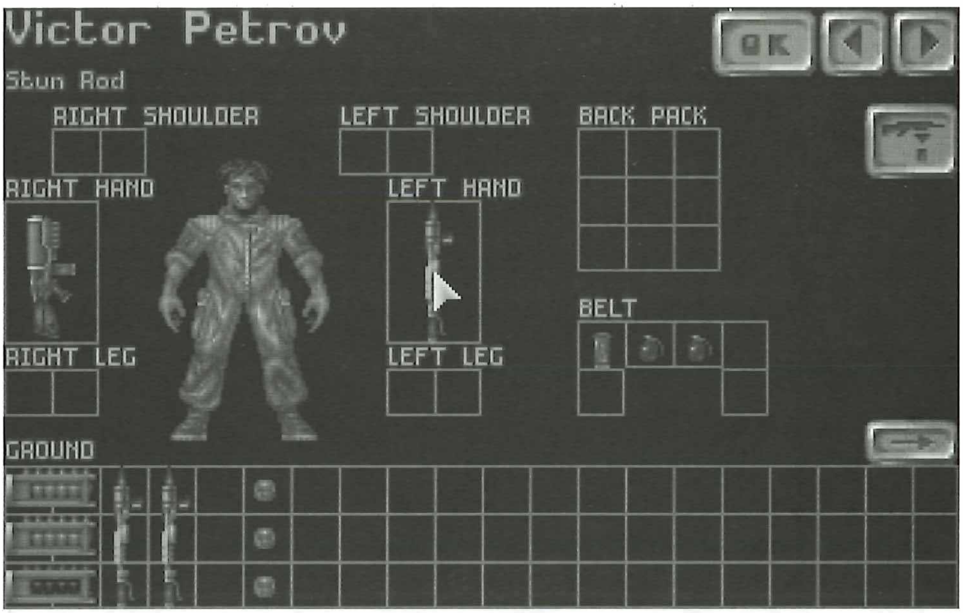

Victor Petrov
Stun Rod
OK
RIGHT SHOULDER
LEFT SHOULDER
BACK PACK
RIGHT HAND
LEFT HAND
BELT
RIGHT LEG
LEFT LEG
GROUND

FIGURE 7.2 *The Equip Soldier screen early in a game*

GETTING MORE WEAPONS

Remember to take what you'll need. You can return to the transport and collect more weapons, but it often takes several wasted turns to do so.

The weapons cache is visible on the transport (it's a dropped weapon icon). To pick up more weapons, move a soldier onto the cache and click the Equip Soldier button on the control bar (middle, top row). Then move the item from the ground to the soldier.

WHO WANTS TO GO FIRST?

Figure 7.3 shows the entire crew lined up inside the Skyranger, waiting to venture onto the battlefield. In front is a cannon/tank, selected and ready to proceed. If you include a tank as a weapon (again, it's highly recommended early in the game), you have no choice about who steps out of the transport first. The tank takes up the ship's entire width, so it has to go out before the soldiers.

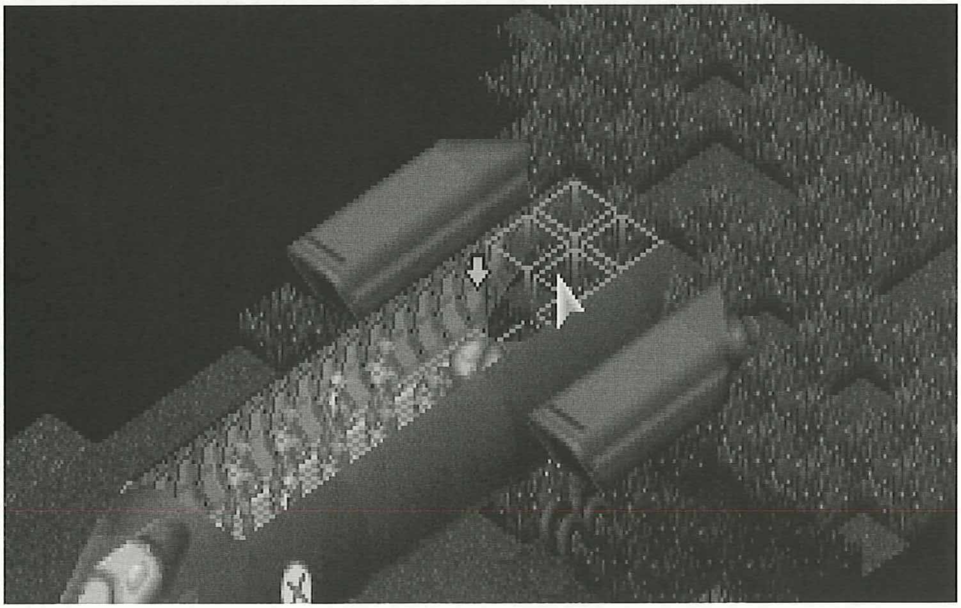


FIGURE 7.3 *The crew ready to leave the Skyranger*

Why does it matter who leaves the ship first? Although it might not happen for a few battles, eventually setting foot onto the ramp becomes akin to a suicide mission. On many occasions, the first soldier out of the ship faces immediate opportunity fire from aliens. If part of a crew is wearing armor, begin the mission with an armor-wearer. Unless, of course, you like the idea of sacrificing a Rookie to soak up the enemy's opportunity fire (Rookies are cheap but they also have names!).

Figure 7.4 shows the tank outside the Skyranger, at the bottom of the ramp and turned to the left. Finding the UFO won't be a problem in this battle. The UFO is the partially seen structure on the left of the screen. The Skyranger practically landed on top of it!

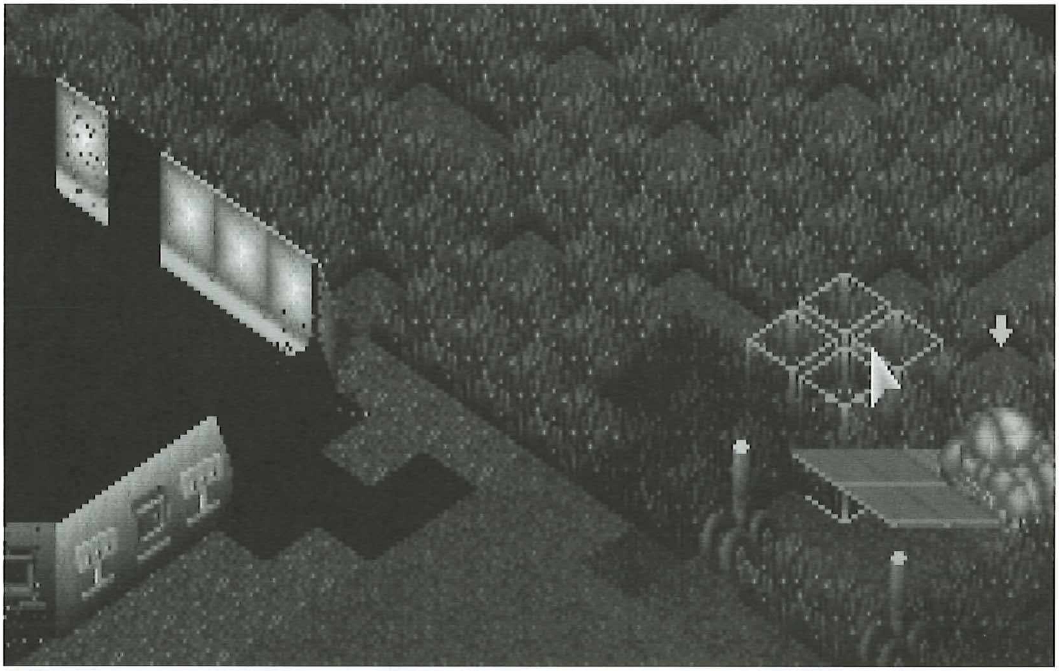


FIGURE 7.4 *The tank turns and sees the crashed UFO*

SEEING WHAT'S OUT THERE

After someone has entered the battlefield and determined if enemy fire will be an immediate problem, the remainder of your first turn should be spent positioning crew members.

Be careful! At this stage of the battle, you have no idea what's out there. You can't afford to just run full-speed into the enemy's arms. One at a time, move your soldiers onto the ramp and down onto the field. Move one or two squares farther if at all, face your soldiers the way you want, and have them kneel down. Kneeling soldiers not only shoot more accurately, they're also harder to hit.

In Figure 7.5, the tank and six soldiers have exited the Skyranger (the other two soldiers remain in reserve). Notice that some of the soldiers are facing to the rear to guard against aliens who might approach from that direction.

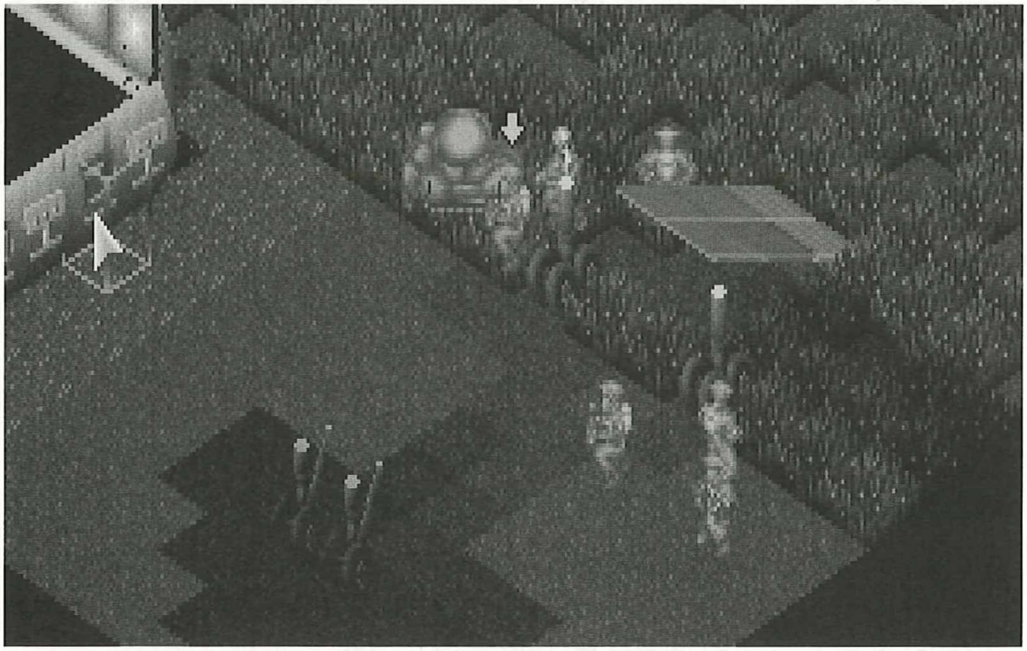


FIGURE 7.5 *The end of the first turn, with all soldiers in position*

RESERVING TIME UNITS FOR OPPORTUNITY FIRE

Beginning with the first turn, reserve enough time units (TUs) for your soldiers to conduct opportunity fire. Time units are handled by the Reserve Time buttons, the four buttons on the bottom-left of the Battlescape control. Early in the game, these buttons help you keep track of how far your soldiers are moving. They assist you in reserving enough time units so your soldiers can engage in opportunity fire during the aliens' turn.

NOTE

The first page of this book shows the Battlescape control bar with all the Reserve Time buttons labeled.

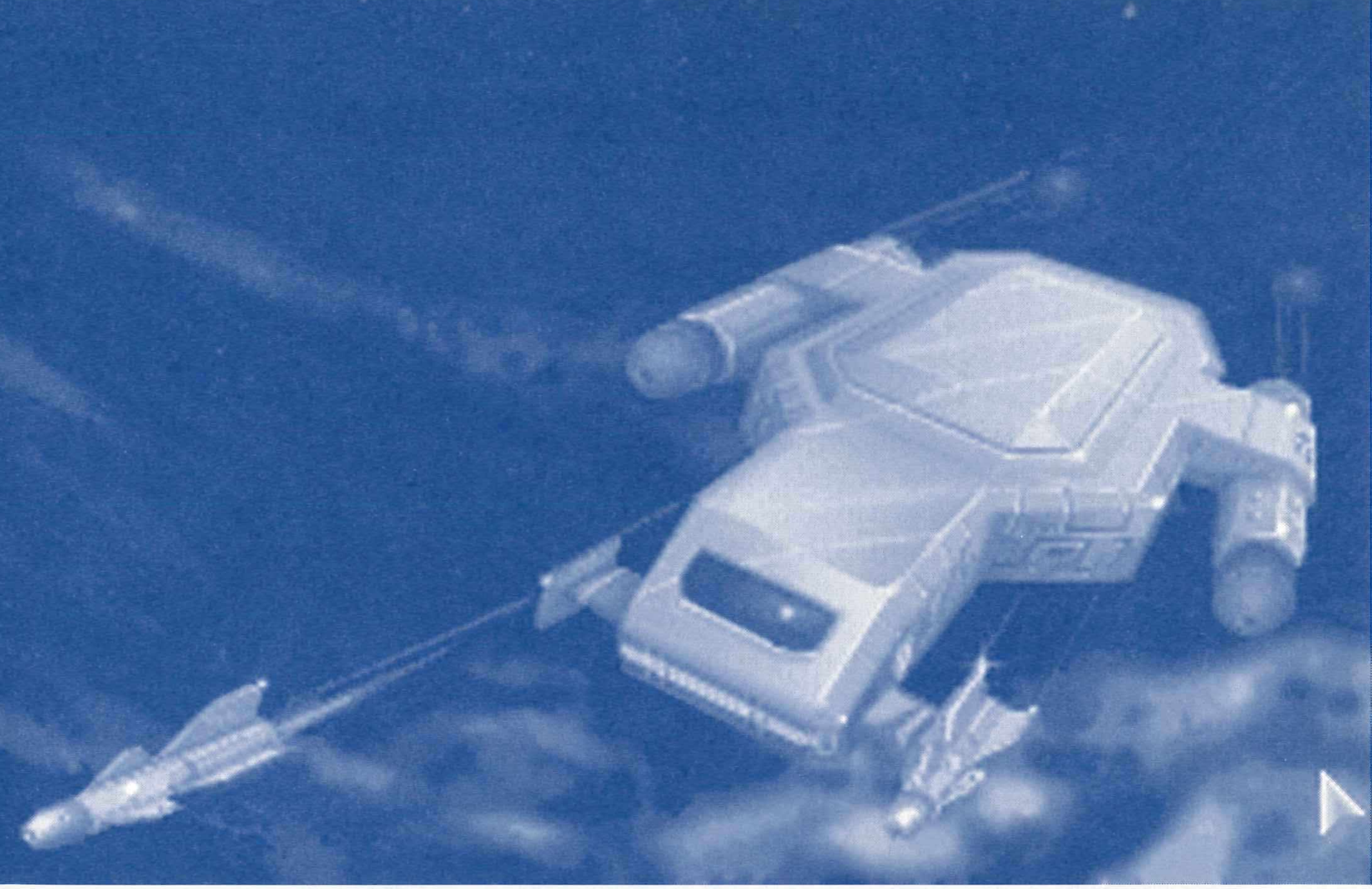
Here's what the four buttons do:

Button	What It Does
Free Movement	This long green arrow means unrestricted movement. You're asking X-COM to give you full control over the soldier's movement without reserving TUs automatically. Late in the game, as you grow to understand the TU system instinctively, you'll use this button more than any of the others.
Reserve for Snap Shot	This red button tells X-COM to reserve enough TUs for the soldier to get off a Snap Shot during opportunity fire (Chapter 3 explains the different types of shots). You have control over the soldier until you've spent all but the number of TUs needed for the soldier to fire a Snap Shot. At that point, you won't be able to expend more TUs unless you click the Free Movement button.
Reserve for Auto Shot	This red button works the same way as the Reserve for Snap Shot button. It reserves enough TUs for an Auto Shot.
Reserve for Aim Shot	This red button works like the other "Reserve for" buttons. It reserves enough TUs for an Aimed Shot.

Reserving TUs is no guarantee that the soldiers will actually fire during the alien turn, even if they spot an enemy creature. Whether soldiers fire depends on the Reaction rating (see Chapter 3). But if you don't reserve enough TUs, there's no chance at all for opportunity fire.

GETTING PREPARED TO MEET THE ENEMY: A CHECKLIST

- ☐ When the game starts, buy a tank and 30 cannon shells, and place it on the Skyranger as soon as it arrives.
- ☐ Load the Skyranger with a rifle and an extra clip for each soldier.
- ☐ Unload the pistols from the Skyranger and sell them.
- ☐ Start researching laser weapons.
- ☐ Buy 3 to 4 high explosives and 3 to 4 stun rods, and load them onto the Skyranger.
- ☐ Take a few grenades, electro-flares, and proximity or smoke grenades.
- ☐ At the site, equip each soldier before starting the turn sequence.
- ☐ Send out at least two stun rods in case you get a chance to capture an alien.



CHAPTER EIGHT

SEARCHING AND DESTROYING

Once soldiers are out of the transport ship, the battle is joined in earnest. At this point, the most important thing to keep in mind is that your soldiers have a job to do, and that to do it they have to work together as a team. The entire X-COM tactical system is based on the idea of fire teams and combined arms. You command troops in small fighting units and provide each unit with a variety of useful weaponry. If the troops don't work together as a team, if they're not carrying the right weapons, your chances of losing the battle increase dramatically.

RAMBOS NEED NOT APPLY!

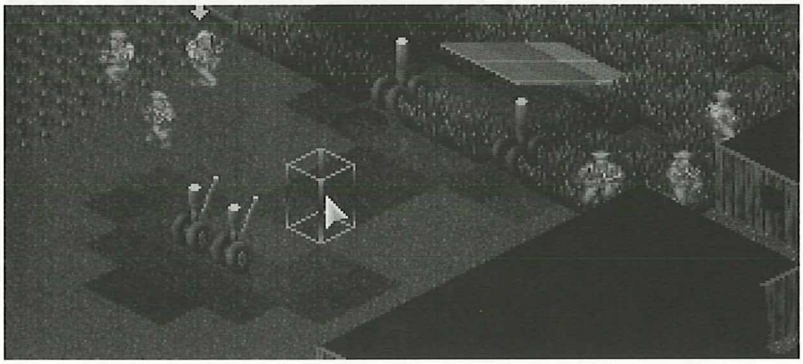
No matter how good individual soldiers become, they can't win a battle in X-COM without teamwork. Soldiers must stick together to win battles. If you treat soldiers like superheroes, if you let them run off in all directions with each taking on a different alien location, you might win a battle or two but you'll almost certainly lose the war. Try the superhero strategy if you want, but be forewarned—it doesn't work.

GROUND STRATEGIES FOR DEPLOYING SOLDIERS

The makeup of your fire teams is entirely up to you. What matters is having a fire team strategy and sticking to it no matter how much of a sure thing the battle seems. Many a player, knowing that the end of a battle is near, has relaxed his or her guard and sent out troops to run down the last two aliens. This is an almost certain way to lose one or two valuable soldiers. The few minutes you gain simply isn't worth it. From first encounter to final mop-up, your fire teams should work as a unit.

THE 360-DEGREE COVERAGE STRATEGY

This graphic shows the first battle of a game, with soldiers combined in fire teams. On the right of the screen, a three-person team is checking out the buildings where alien fire originated. At the top left, a second team makes its way carefully toward the crashed UFO. Out of sight is the tank that spotted the UFO during this turn.



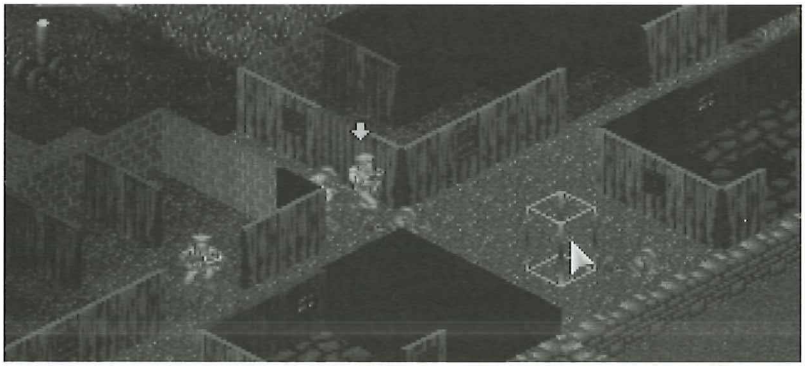
The team on the right demonstrates a useful technique: the soldiers are facing different ways. While one soldier stares straight down an alley (in fact, he should have been placed partially behind a wall instead), the soldier to his left guards his rear by watching for aliens approaching from the other direction. To his right, another soldier is ready for opportunity fire against aliens in case they appear near the bottom of the screen.

The second fire team at the top of the screen uses a similar approach. The problem in this case is that the tank drew fire from two directions, but neither alien is in sight. Again, caution is necessary, and the second fire team is deployed to allow a 360-degree coverage.

BE FLEXIBLE ON THE FIELD OF BATTLE

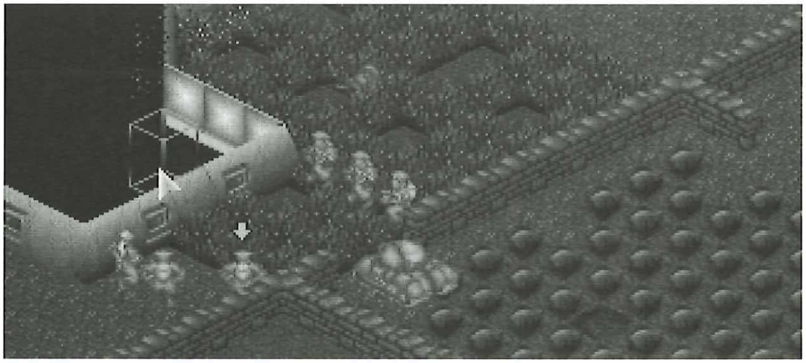
Obviously, you can't keep fire teams in perfect formation throughout an entire battle. Things change. Soldiers get killed. New opportunities present themselves. Aliens start firing from many different directions. The best strategy for the battlefield, in fact, is a simple one: Be flexible. By continually adapting to the situation at hand, you'll have a good chance of winning each battle. If you don't adapt, you'll probably be wiped out.

This next screen shows the results you get when a fire team works together. Three soldiers can fire more shots than one, and the two aliens lying between the buildings have been destroyed by a hail of gunfire. Both aliens were killed by a third hit, the last shot from the three soldiers combined. Now the fire team is forming for an assault on the remaining buildings. All the soldiers are using the buildings themselves for shelter. All alien approaches are covered.

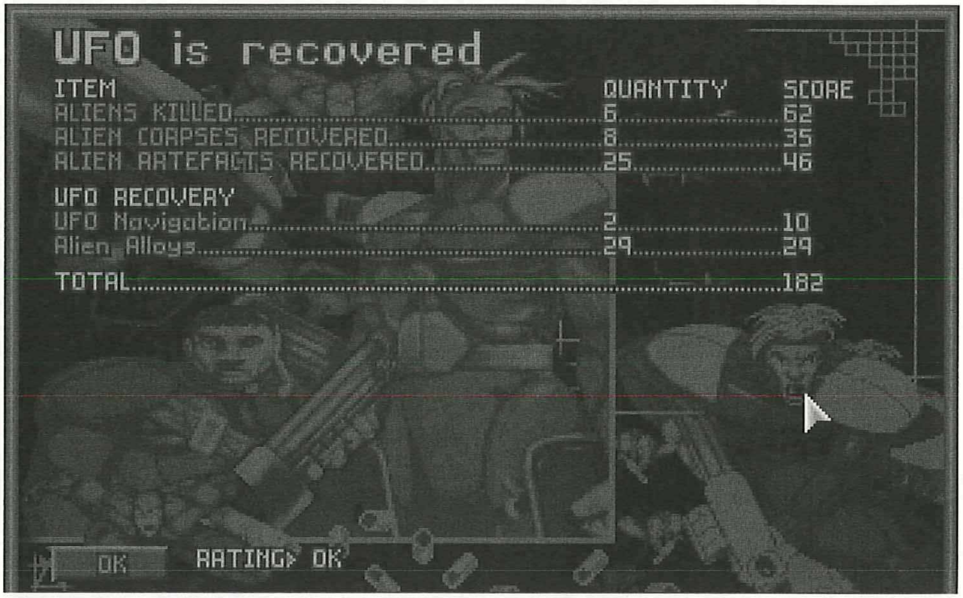


APPROACHING A UFO

Now the fire teams rejoin outside the UFO. The tank faces the door in order to pick off any aliens who exit the craft. A wise choice is to assemble two fire teams outside a UFO, one on either side of the door, then move them in an orderly fashion through the door towards the inevitable confrontation.



The results of all this teamwork? Well, take a look at Figure 8.1, the score sheet you receive at the end of each battle. Here we see not only that alien corpses were recovered, but that artifacts and two other crucial items—UFO navigation and alien alloys—were recovered as well. With one successful combat, you can begin researching alien craft in detail.

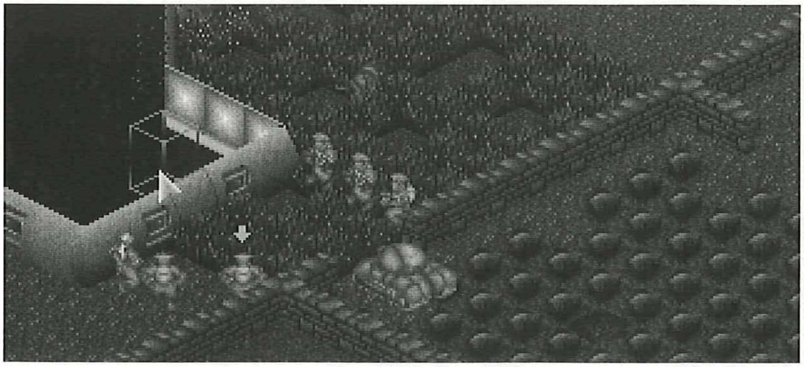


```
UFO is recovered
ITEM                                        QUANTITY     SCORE
ALIENS KILLED...............................6............62
ALIEN CORPSES RECOVERED.....................8............35
ALIEN ARTEFACTS RECOVERED...................25...........46
UFO RECOVERY
UFO Navigation..............................2............10
Alien Alloys................................29...........29
TOTAL....................................................182
```

FIGURE 8.1 *The end of the first battle. Important items can now be salvaged.*

BRINGING THE RIGHT WEAPONS TO BATTLE

As discussed in Chapter 3, research and production should proceed as quickly as possible so your soldiers can get better weapons. As soon as you begin work on the Battlescape, you'll quickly discover why. Run-of-the-mill pistols are nearly useless, and run-of-the-mill rifles aren't much better. Until you equip your squad with laser weapons at the very least, and preferably with plasma weapons, taking on anything more than small UFOs is practically out of the question.



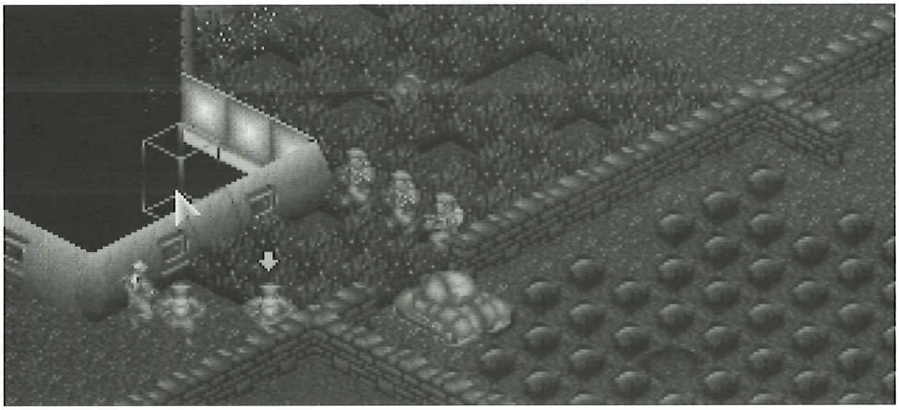
This screen shows a typical terror site. Here, still early in the game, a fire team forms a ring for self-protection just outside a Skyranger. A fallen comrade lies behind the fire team. This team is much better armed than it was during the first battle. Research and manufacturing have given the team not only laser rifles, but the first plasma rifles as well. This team has a better chance of winning the battle, but winning will still be difficult.

BRING ALONG OFFENSIVE AND DEFENSIVE WEAPONS

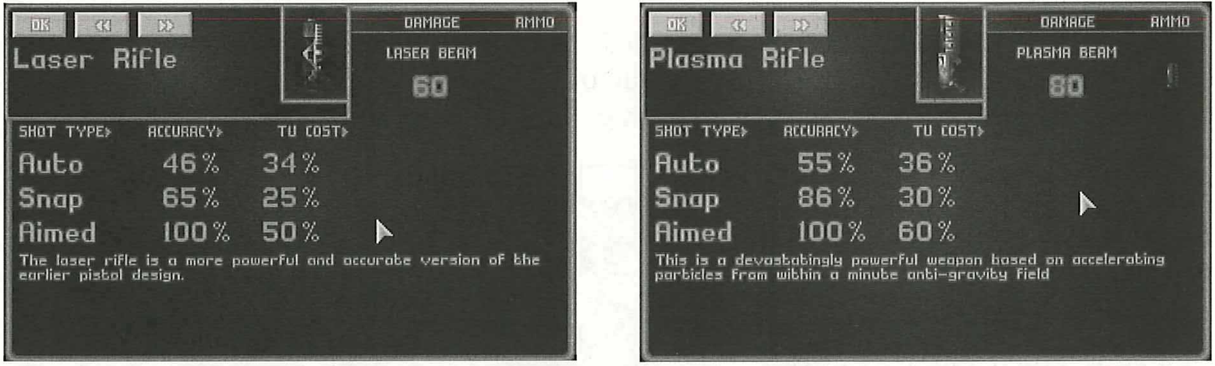
As in real-life military encounters, one of the secrets of success is bringing along the right combination of arms. You have to bring along the right combination of personal firearms, explosives, and vehicles to get the maximum amount of offensive and defensive potential. X-COM rewards the combined arms philosophy in spades. You can experiment with many different arms combinations. Equip your fire teams with a variety of arms, because an array of weapons offers the best chance of success.

PISTOLS AND RIFLES

You begin the game with pistols and rifles. The benefit of pistols is that they're cheap, plentiful, and light. All soldiers can carry them and use them, but beyond that they're useless. Much better are the rifles. As the Rifle UFOpaedia entry shows, rifles have much more killing power. The only disadvantage of rifles is that they're a two-handed weapon. Soldiers lose accuracy when they carry a rifle in one hand and another weapon in the other. Still, rifles are worth it.



The benefit of laser weaponry is that lasers inflict far more damage than bullets. The laser pistol is less accurate than the normal pistol, so you gain no benefit there, but you do gain when it comes to inflicting damage. The damage level of a laser pistol is nearly double that of a normal pistol, so a hit counts for a great deal more. The laser rifle has similar accuracy to the normal rifle, but again it does far greater damage. Figure 8.2 shows a quick UFOpaedia comparison between a laser rifle and a plasma rifle. The damage level is at the top right.



Laser Rifle

DAMAGE AMMO

LASER BEAM

60

SHOT TYPE>	ACCURACY>	TU COST>
Auto	46%	34%
Snap	65%	25%
Aimed	100%	50%

The laser rifle is a more powerful and accurate version of the earlier pistol design.

Plasma Rifle

DAMAGE AMMO

PLASMA BEAM

80

SHOT TYPE>	ACCURACY>	TU COST>
Auto	55%	36%
Snap	86%	30%
Aimed	100%	60%

This is a devastatingly powerful weapon based on accelerating particles from within a minute anti-gravity field

FIGURE 8.1 *The UFOpaedia entry for the laser rifle (left) and the plasma rifle (right)*

Good as the laser rifle is, it pales beside the plasma rifle. The plasma offers significantly better damage, and its accuracy is strong as well. Not shown here is the heavy plasma, a highly recommended firearm, whose damage rating is 115 rather than the plasma rifle's measly 80. Still, the plasma rifle is a very workable weapon.

EXPLOSIVES

Explosives are the weapons that, well, explode. They offer destructive power over accuracy. It's necessary to actually hit a target when you're aiming a rifle at it, but all an explosive has to do is fall somewhere close to the target. As long as the target is within the explosive's blast zone, the target will be damaged.

WARNING

Explosives don't care much about uniforms. When you throw one, make sure your troops aren't in the blast zone.

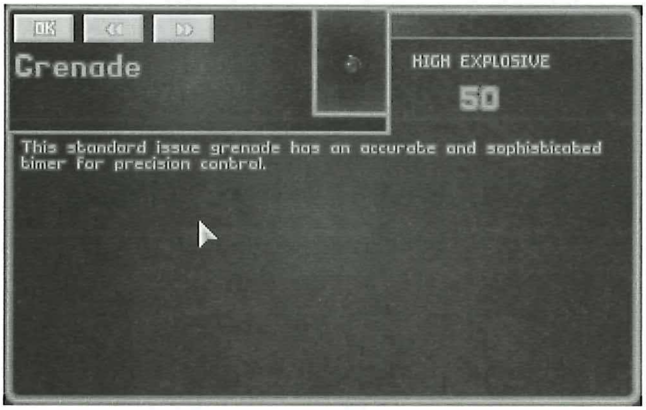
Unfortunately, so will anyone else who happens to be standing nearby, including members of your own squad.

Typically and traditionally, explosives are used to "soften up" an area before actual human beings advance into it. There's no artillery in X-COM (artillery is the long-range "softening up" mechanism), but the game does offer portable explosives ranging from grenades at the bottom end of the scale to alien-based blaster bombs at the top. Each explosive has its own uses and its own value for a squad.

Grenades

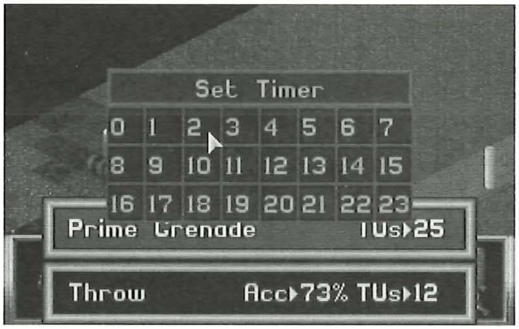
The simple but reasonably effective grenade is small and easy to throw. Toss it into an alien-held building to kill or knock out the enemy, then send your soldiers into the building with guns blazing.

At least, that's the way it's supposed to work. In practice, the grenade often isn't strong enough to kill the aliens outright. But they help.



This standard issue grenade has an accurate and sophisticated timer for precision control.

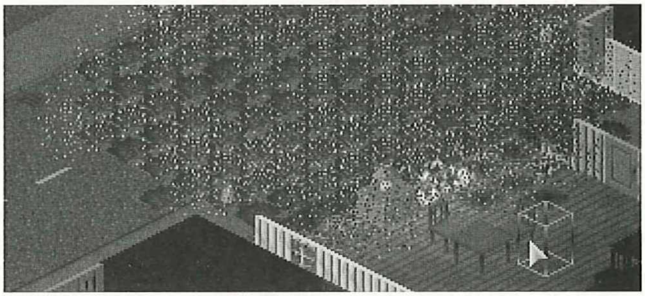
To use a grenade, place it in the soldier's hand; it will then appear as a weapon beside the control bar. Click on the grenade and you'll be given the choice of priming it (Prime Grenade) or throwing it (Throw). You can throw it if you want, but it won't explode. To make it explode, you have to prime it. The numbers that appear when you select Prime Grenade represent the number of turns it will take for the grenade to explode. If you want it to explode upon contact, choose 0; at the end of the current turn, choose 1. If you want it to explode at the end of next turn, choose 2. And so on.



But be careful! If you choose 0 and you don't have enough TUs to throw the thing, it will blow up in your face. Also be careful not to set a grenade to explode in three turns, then forget and march your soldiers to the detonation point.

High Explosives

Grenades are not nearly as powerful as high explosives. These babies work just like grenades (they're more expensive), but they do far more damage. The damage rating for a grenade is 50; for a high explosive, 110.



Here you can see what happens when a high explosive blows up on an open street. Even though the explosive was thrown well shy of the building, it ripped away one of the walls. High explosives can be extremely useful on terror sites and large UFOs when you need to wipe out a number of aliens all at the same time.

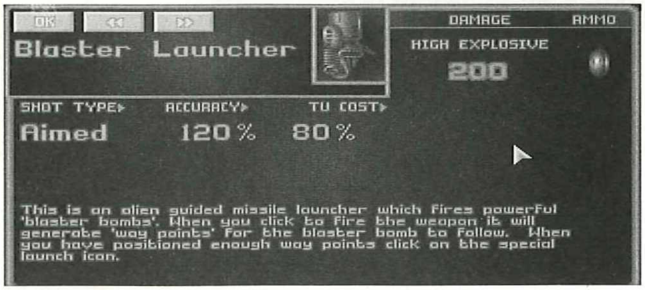
Smoke and Proximity Grenades

The other two immediately available explosives are the smoke grenade and the proximity grenade. Use smoke grenades to conceal your movements. They can be extremely useful when the Skyranger lands in open ground and aliens have their weapons trained on your squad from contact.

Proximity grenades are triggered by anything that passes close to them, so place smoke grenades outside areas where you know aliens are hiding.

Deadly Explosives

Once you begin conducting alien research, you'll have other explosives at your command. Alien grenades are more powerful than standard grenades. They're worth picking up if you can find them, but don't bother manufacturing alien grenades. Stun bombs, which are launched by small launchers, are crucial to the game. They let you stun aliens from a distance, whereas the stun rod requires you to be adjacent to the alien.



Blaster Launcher

DAMAGE AMMO

HIGH EXPLOSIVE 200

SHOT TYPE▸ ACCURACY▸ TU COST▸

Aimed 120 % 80 %

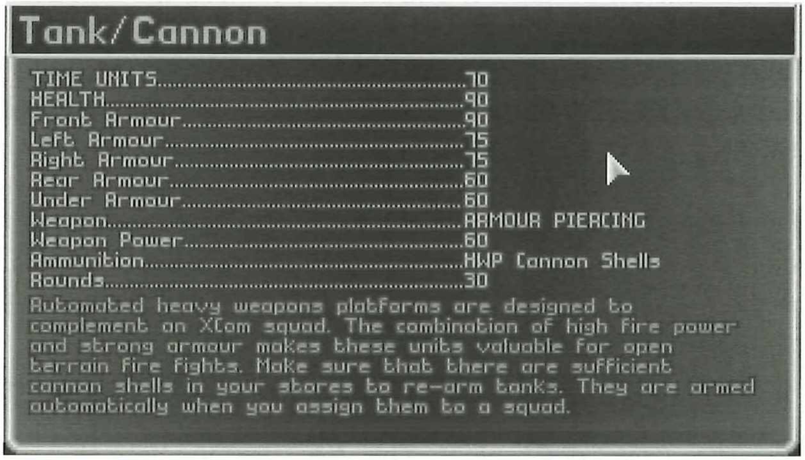
This is an alien guided missile launcher which fires powerful 'blaster bombs'. When you click to fire the weapon it will generate 'way points' for the blaster bomb to follow. When you have positioned enough way points click on the special launch icon.

The most deadly explosive of all, however, is the blaster bomb. It has a damage rating of 200, and it's even better than it seems. As the UFOpaedia entry for the blaster launcher says, you don't just fire the blaster bomb, you guide it. You click on way points for the bomb to follow, and it explodes at the final destination. It's even capable of blasting out the walls of UFOs. A truly awesome weapon, and a great combined arms companion.

Tanks, a Lot

X-COM's tanks (called heavy weapons platforms, or HWPs) are valuable for the same reason that they're valuable in real wars: They roll along, they have good weapons, and they're fully armored. As part of a combined arms strategy, tanks are particularly useful for leading the way into unknown areas. They can take several hits (depending on the alien weapon, of course), and if you lose one you can simply buy another. When a tank is hit, you don't lose precious soldiers.

The tank/cannon is available from the start of the game. You have to buy it and at least 30 HWP cannon rounds, but it's well worth the money. A tank is a substantial armament against alien weapons.



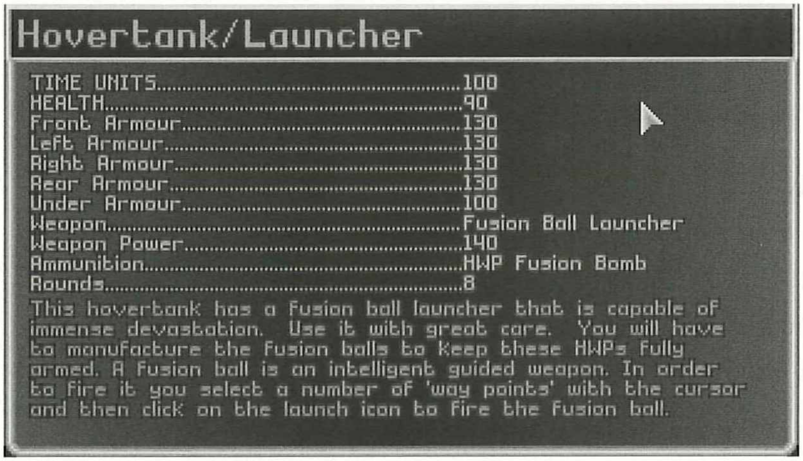
Tank/Cannon

TIME UNITS	70
HEALTH	90
Front Armour	90
Left Armour	75
Right Armour	75
Rear Armour	60
Under Armour	60
Weapon	ARMOUR PIERCING
Weapon Power	60
Ammunition	HWP Cannon Shells
Rounds	30

Automated heavy weapons platforms are designed to complement an XCom squad. The combination of high fire power and strong armour makes these units valuable for open terrain fire fights. Make sure that there are sufficient cannon shells in your stores to re-arm tanks. They are armed automatically when you assign them to a squad.

As soon as possible, upgrade to a tank/laser. When you upgrade, you can sell the tank/cannon or transfer it to a fledgling transport ship at a new base. The tank/laser has more powerful laser weaponry and you don't have to worry about stocking ammunition for a tank/laser. Another possibility for replacing your tank/cannon is the tank/rocket

launcher. With its high-powered HWP rockets, the tank/rocket launcher is very powerful and excellent for attacking terror sites.



Hovertank/Launcher

```
TIME UNITS.....................100
HEALTH.........................90
Front Armour...................130
Left Armour....................130
Right Armour...................130
Rear Armour....................130
Under Armour...................100
Weapon.........................Fusion Ball Launcher
Weapon Power...................140
Ammunition.....................HWP Fusion Bomb
Rounds.........................8
This hovertank has a fusion ball launcher that is capable of
immense devastation.  Use it with great care.  You will have
to manufacture the fusion balls to keep these HWPs fully
armed. A fusion ball is an intelligent guided weapon. In order
to fire it you select a number of 'way points' with the cursor
and then click on the launch icon to fire the fusion ball.
```

Late in the game, you'll have acquired the technology to build hovertanks. Hovertanks have a substantially higher number of TUs to work with each turn, and both types—the hovertank/plasma and the hovertank/launcher—are very powerful. The hovertank/launcher, in fact, uses fusion bombs, which are similar to blaster bombs but are even more powerful. The hovertank/launcher is a truly deadly weapon. It is excellent for attacking landing sites of very large UFOs, terror sites, and alien bases.

THE COMBINED ARMS STRATEGY

A combined arms approach to combat lets you take advantage of all the firepower available to you. Tanks lead the way and provide excellent firepower, but since tanks can't go down alleyways and up stairs, you need well-equipped soldiers. Soldiers should have laser or plasma rifles, and heavy plasma as the game advances. Give some soldiers high explosives and others stun bombs or even blaster bombs.

In the combined arms strategy, a tank blasts its way through to an intact UFO, for instance, and soldiers are saved for the confrontation inside. The soldiers are split into two well-armed fire teams, each going a separate way. A high explosive is tossed into an area where you're certain aliens await you. Once your soldiers make it to the control room, you get your stun bombs ready and prepare to carry away an alien leader or even a commander.

SEARCHING AND DESTROYING: A CHECKLIST

☐ Combine your soldiers into at least two fire teams of three soldiers each.

☐ Face members of the fire team in different directions for mutual fire support.

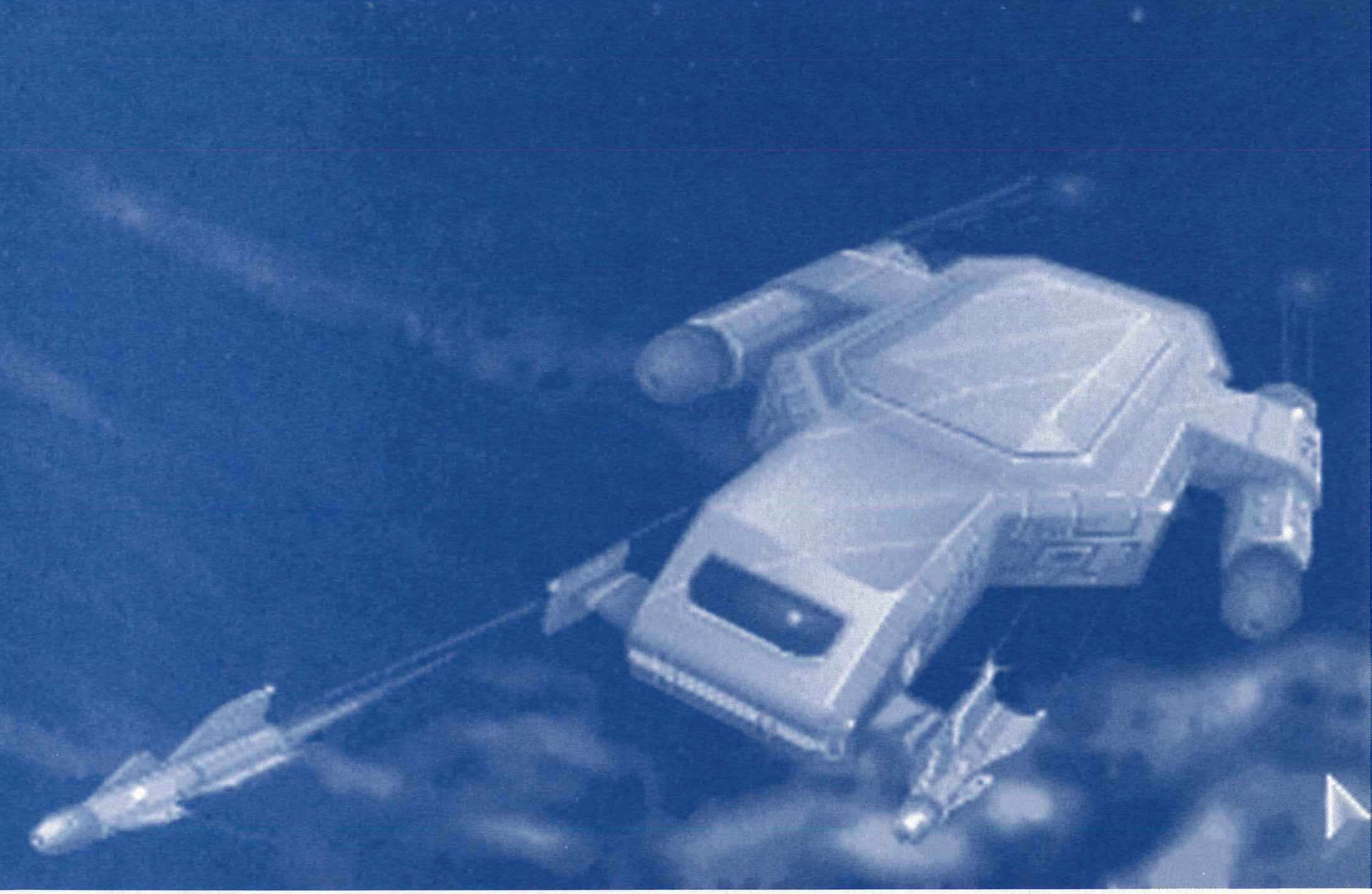
☐ Move fire teams cautiously through dangerous areas.

☐ Carry firearms and a variety of explosives into battle.

☐ Lead with your tanks, letting them draw fire.

☐ Detonate explosives in known alien hiding places.

☐ Use stun bombs to capture aliens rather than kill them.



CHAPTER NINE

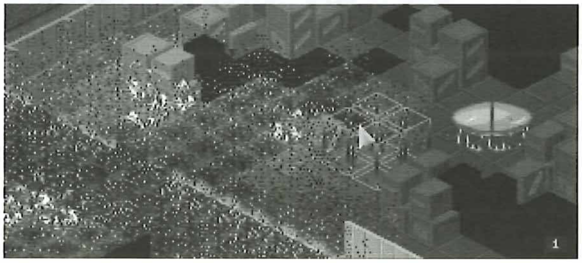
KNOWING YOUR ENEMY

NINE

In X-COM, the name of game is aliens. You destroy them. You capture them. They cause endless headaches. If you don't learn how to deal with them, you'll never get out of the gate. This chapter outlines the differences among the alien races and subraces. It describes what it's like to take on each of the alien sites. None of it matters at all without a thorough knowledge of tactical combat, as discussed in Chapters 7 and 8, but knowing your enemy is an essential part of war.

FACE TO FACE WITH THE ALIENS

This screen shows a typical terror site. An X-COM tank has its sights trained on an alien Cyberdisc at the far right of the screen. A Cyberdisc is deadly and hard to kill. It can withstand several consecutive shots from a laser rifle, so if you're serious about knocking Cyberdiscs out you'd better bring along some plasma. With standard rifles and pistols—well, forget it.



Throughout this book, you'll see many screens like this one that show X-COM agents facing aliens. If you've researched the Mind Probe and you have one along, you can always discover what kind of alien you're looking at and what his "ranking" is. Knowing the rank of aliens is important, since the last thing you want to do is gun down an alien leader or commander. Remember, the more aliens you capture, the faster your research can progress.

Once you've faced an alien type, it's extremely useful to record its strengths and weaknesses. Or simply look in this book. You're bound to find more information about aliens as you play the game, but the bulk of what you need is right here in this chapter.

Good hunting. You'll need it.

THE ELEVEN TYPES OF ALIENS

As you battle your way through landing sites and alien bases, you come into contact with the eleven different alien races. Each has its strengths and weaknesses, but the main thing to keep in mind is that no race can be taken lightly. All are armed with either natural or manufactured weapons, and all shoot to kill. Some aliens even attempt to take over your soldiers' minds. They force your soldiers to turn against their X-COM comrades and join the other side.

Aliens are a truly hateful lot. In fact, one of X-COM's greatest strengths as a game lies in the fact that you do end up hating these creatures. The 1990s is a decade of toleration (especially for the weird and off the wall), and these days it would be difficult to design a game that relies solely on xenophobia for its playing impetus. X-COM goes beyond xenophobia. The enemy engages in gruesome experiments on people and animals, and by midpoint in the game you'll have no doubt whatsoever that the only way to deal with the aliens is to destroy them. A nice touch, and one that consistently works.

There are eleven types of aliens. Ethereal, Floater, Muton, Sectoid, and Snakeman are races. The other six—Celatid, Chryssalid, Cyberdisc, Reaper, Sectopod, and Silacoid—are essentially terrorists and can be found together with the alien races in large sites such as alien bases and terror sites. The associations, for the most part, are as follows:

Race	Associated Terrorists
Ethereals	Sectopods
Floaters	Reapers
Mutons	Celatids and Silacoids
Sectoids	Cyberdiscs
Snakemen	Chryssalids

KNOW WHICH ALIEN GROUPS HANG TOGETHER

Knowing which types of aliens can be found together is important for forging a strategy. The whole point is knowing what to expect. If a Cyberdisc fires at you as soon as you leave the transport, for instance, you can expect Sectoids at the same site. Similarly, if you're battling Floaters at an alien base, you can be almost certain that even more devastating Reapers are in the area. Knowing which type of aliens you're facing can help you decide how to fight and whether to fight. There's nothing wrong with aborting a mission because you can't handle the aliens you're up against.

ALIEN RANKS

Your soldiers have ranks, and so do aliens. The alien races have six possible ranks, but the terrorists are classed only as Terrorists (appropriately, I might add). Here are the six alien ranks from lowest to highest: Soldier, Engineer, Medic, Navigator, Leader, and Commander.

WHAT YOU LEARN BY INTERROGATING ALIENS

By far the majority of aliens you meet are simply soldiers. You should capture a few of them, but for the most part they're eminently expendable. Not so the other ranks. To gain a full knowledge of the races, their missions, and eventually the alien invasion as a whole, you need to capture representatives of every race at every rank. And since the most important ranks are present only on large sites or bases, capturing them can be extremely difficult. Stun bombs are essential for this job.

TIP

Capture representatives of every alien race and rank. To win the game, you have to learn everything there is to know about the aliens.

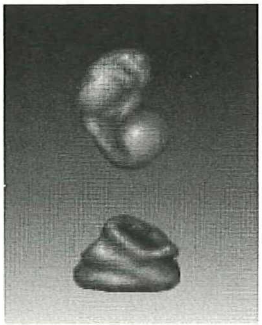
When you capture an alien and research it back at the base, you discover information about the race of the alien and about alien missions. Here is a list of which ranks offer which details:

Rank	**What You Can Learn**
Soldiers	Information about the race of the soldier, including its strengths and weaknesses
Engineers	Details about alien ships and, later, such items as the hyperwave decoder
Medics	Information about the race of the medic and other races as well, in considerable detail
Navigators	Information about the type and variety of alien missions
Leaders	Information about the Martian Solution, which you'll need to complete the game
Commanders	Details about Cydonia or Bust, also needed to complete the game

When you combine this information with research, you can build alien-based weapons and crafts.

A CATALOGUE OF ALIEN RACES

This section describes each type of alien in detail. Turn here to learn each type's characteristics. The characteristics are given not in numbers, but rather by the more qualitative ratings Low, Medium, and High. As a game, X-COM uses numbers as the basis for all its activities, but as a player you're better off concentrating on qualities instead. Not only is it more enjoyable, it's also more realistic.



Celatid

Speed: High

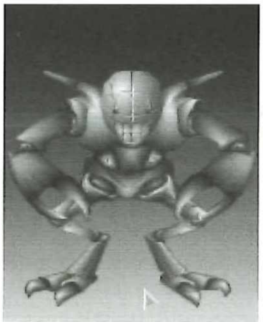
Accuracy: Medium

Endurance: Medium

Reactions: Medium

Armor: Medium

Because the Celatid can fly, or more accurately float, it can maneuver freely through the Battlescape. As if that's not bad enough, it also appears to have the ability to find X-COM soldiers easily and quickly. Celatids associate with Mutons. According to reports from alien medics, they can sense or detect your soldiers no matter where they are. A Celatid doesn't have to see you to shoot at you. And as far as shooting is concerned, forget good old plasma clips. These things toss truly ugly spitballs—venomous spitballs to boot. If they were more accurate, they'd be unstoppable.



Chryssalid

Speed: High

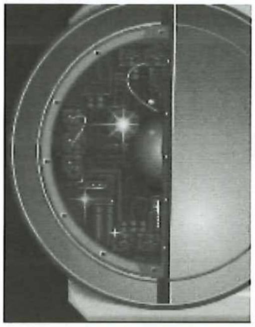
Accuracy: Touch only

Endurance: High

Reactions: High

Armor: High

Beware. Be doubly aware. If you tangle with a group of Chryssalids, expect to take a lot of casualties. Worse, the casualties don't just disappear. Instead, soldiers and civilians who are touched by a Chryssalid are "impregnated" with an egg and injected with venom that turns them into walking zombies. Not only are these zombies deadly by themselves, they also eventually (like, soon) turn into new Chryssalids. And they do so when you shoot them. Once you destroy them in their zombie state, they turn into Chryssalids, and you have to take them out in their Chryssalid state as well. Not fun, not at all. Chryssalids associate with Snakemen.



Cyberdisc

Speed: High

Accuracy: Medium

Endurance: High

Reactions: High

Armor: High

As if Sectoids weren't tough enough on their own, they tend to bring with them a race of flying rejects from bad old flying saucer movies. Cyberdiscs hover above the ground or move quickly across the Battlescape. If X-COM soldiers are nearby, Cyberdiscs seem to always spot them. Not only that, but shooting at a Cyberdisc doesn't do much at all, not unless you have plasma rifles or heavy plasma at your command. The good news is that they can be mind-controlled (once you know Psionics), and that if you destroy them they sometimes explode and kill Sectoids who happen to be standing nearby. Usually, though, even the Sectoids aren't that stupid.

Ethereal

Speed: High

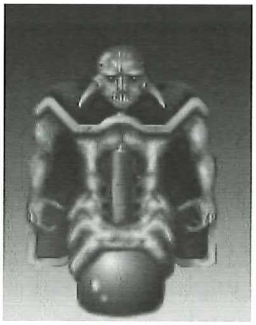
Accuracy: High

Endurance: High

Reactions: High

Armor: High

Simply put, there's nothing wrong with Ethereals. At least, not from their own perspective. From X-COM's standpoint, everything's wrong with them. They have a highly developed ability to control your soldiers' mind, they fly across the Battlescape almost effortlessly, they're extremely accurate when they fire weapons (which, thankfully, isn't often), and they wear cloaks that absorb more hits than all but the best X-COM armor. Their most important weapon in Psionics, which they use freely and devastatingly. Against a group of Psionics you have next to no chance early in the game, and precious little chance without Psionic ability of your own. Incidentally, capturing an Ethereal—any Ethereal—is the first step on the road to Psionic mastery. They can usually be found with Sectopods.



Floater

Speed: High

Accuracy: Medium

Endurance: Medium

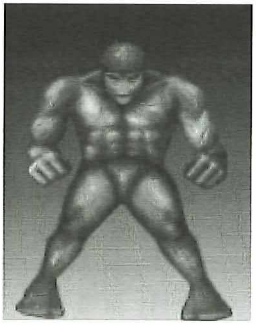
Reactions: Medium

Armor: Low

Floaters look pretty ugly. Oddly enough, however, they're not all that dangerous. Their ability to float above the Battlescape gives them a strong speed characteristic, but they're easy enough to kill. Your squads should survive even early battles against these foes. Floaters are often in charge of alien bases during the early part of the game. Floaters are usually found with Reapers.

TIP

If you're well prepared, you can give yourself a huge head start by getting through an alien base and capturing a Floater leader or commander early in the game.



Muton

Speed: Low

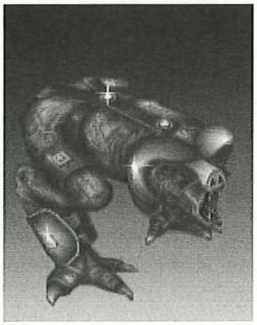
Accuracy: High

Endurance: Medium

Reactions: Medium

Armor: Medium

Mutons look a bit like a space-age version of the Hulk, and with their good armor rating they're roughly as difficult to kill. Unlike Doc Banner, however, they fire weapons rather than engage in fisticuffs, and their excellent accuracy and plasma weapons make them deadly foes indeed. Mutons are practically slaves of Ethereals, and appear to fight in order to do the bidding of that higher-level race. When they are separated from Ethereals, they flounder and die. A Muton autopsy shows that the Muton race has been manufactured as much as it's been bred, and that its only function is killing. Mutons are dangerous but can be dealt with. Mutons are usually found with Celatids and Silacoids.



Reaper

Speed: Medium

Accuracy: Touch only

Endurance: High

Reactions: High

Armor: High

Reapers follow Floaters around and make up quite nicely for whatever weaknesses Floaters have. Engaging in hand-to-hand combat only, these stupid, gruesome pug-uglies possess a deadly bite that can destroy even a heavily armored tank. Apparently under Floater control, the Reapers do nothing but terrorize the populace and destroy your soldiers, but that's enough. With this much power, the last thing Reapers need is intelligence.

Sectoid

Speed: Medium

Accuracy: Medium

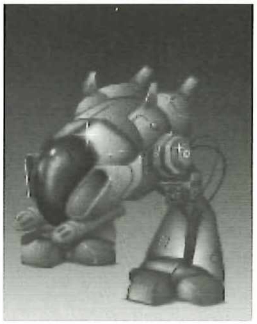
Endurance: Low

Reactions: High

Armor: Low

Sectoids look for all the world like a particularly bad costume design from Lost in Space, and the way they stand in the fields with their great big plasma weapons in their hands make them look like a bunch of E.T.'s. But trust me, these things aren't nearly as powerless as they seem. Sectoids are quite accurate with their weapons and, despite having extremely low armor ratings, are fairly hard to hit. More importantly, though, high-ranking

Sectoids have Psionic abilities, and they mind-control as well as any alien except Ethereals. Sectoids have an uncanny ability to turn your own soldiers against you. They are found with Cyberdiscs.



Sectopod

Speed: Medium

Accuracy: Medium

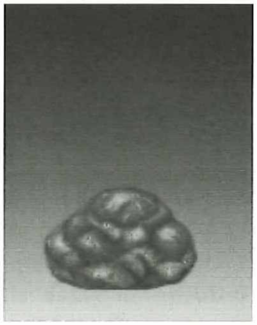
Endurance: High

Reactions: High

Armor: High

Facing Ethereals isn't bad enough, right? They have to bring along these devastating war machines, Sectopods. Let's put it this way: If your main base gets invaded early in the game by a combined force of Ethereals and Sectopods, just start over. Starting over is easier than watching all those soldiers being massacred no matter what they do.

Sectopods are extremely difficult to kill (the best armor in the game), and their high-level plasma weapons make even your best armor seem quite puny. Sectopods can be killed, but only by blaster bombs or by hitting them with wave after wave of soldiers.



Silacoid

Speed: Low

Accuracy: Touch only

Endurance: High

Reactions: Medium

Armor: Medium

The Silacoid race might look (and sound) like Silly Putty, but it has the rather annoying ability to eat through whatever stands between it and its destination. Its ancestry appears to trace back to the Horta from the original Star Trek series (one of the truly great episodes), except there aren't any cute little baby boulders to worry about. Silacoids are usually found in the company of Mutons. When fighting them, keep your tanks and hovercraft out of their way, since Silacoids are very adept at destroying them.

Snakeman

Speed: Low

Accuracy: Medium

Endurance: Low

Reactions: Medium

Armor: Medium

The Snakeman race might be the only species you should consider "easy pickings" in the early going. Not that they're pushovers, it's just that they're not nearly as deadly as the other things you could meet. Unfortunately, Snakemen sometimes bring Chryssalids with them, and the combination of the two is extremely dangerous indeed. Fire at Snakemen, and take advantage of opportunity fire.

STRATEGIES FOR ATTACKING ALIEN SITES

Throughout this book, you've seen screens showing X-COM troops in action. In every case, the troops were invading one of five different alien sites. These sites and their typical characteristics are outlined briefly in this section. Each site has its own peculiarities, and attacking each requires a different strategy.

BASES

Bases are the most dangerous alien sites of all. In fact, as you'll discover in Chapters 10 and 11, the game ends in an alien base. You'll discover several bases scattered throughout the world. The important thing about bases is that they offer opportunities for capturing massive amounts of material and alien items—and alien medics, engineers, leaders, and commanders as well. You need to take on a base at some point in order to win the game.

Bases typically have multiple levels. They're enclosed in walls. Inside these walls you'll find lifts, experiments, strange foliage, and, of course, aliens. The trick is to locate the main control area, which usually is a large multilevel room ringed by a corridor in an area outside the main walled region. There you'll usually find the leaders and commanders. Since bases are so important, be sure to equip your troops with stun rods and, later, stun bombs, in order to capture as many creatures as you can.

TIP

When you invade an alien base, attack the main control area and capture the leaders and commanders there.

CRASH SITES

From the very beginning of the game, you'll come into contact with crash sites. In fact, you're responsible for crash sites. Whenever you shoot down an alien craft over land, you see the message "UFO Crash Lands." A white X appears on the map, and if you send your troop transport there you'll enter the crash site.

Crash sites contain the fewest aliens of any site, mainly because several get killed in the crash itself. Usually most of the useful equipment gets destroyed as well, including power supplies and navigation units. To clean out a crash site, find the UFO and get rid of the aliens still inside. Destroy or capture those outside the UFO as well.

LANDING SITES

You have to force UFOs to crash-land early in the game, but let them land safely as soon as possible. An intact UFO repays you with materials, artifacts, equipment, and capturable aliens. A UFO that does not crash but lands safely instead is considered a "landing site" rather than a "crash site." In a landing site, you have to locate the UFO and destroy or capture all the aliens, and it's harder to do because more aliens are alive at landing sites than at crash sites. However, the booty at a landing site is more valuable as well.

TERROR SITES

The result of an alien terror mission is the establishment of a terror site. When aliens establish a terror site, you see a full-screen notice that shows a civilian with fear in his eyes and death around the corner. As soon as your troops have any decent equipment at all, you *must* intercept and clean out these sites. If you don't, you'll see your funding plummet.

Since there's no center to a terror site—that is, no UFO or control room—your only recourse is to search and destroy. Terror sites offer a street fighting challenge. They force you to use your tactics to their utmost and not to let your troops get too far separated from one another.

TIP

The best way to tell what an alien ship is trying to do is to research and then build a hyperwave decoder facility. With a decoder you can tell what a craft's mission is.

STRATEGIES FOR HALTING ALIEN MISSIONS

Throughout X-COM games, aliens land on earth to conduct missions. There are eight different types of missions, each one designed for a special purpose. Here are the eight (in alphabetical order) and what they set out to accomplish.

ABDUCTIONS

In an abduction mission, aliens sweep down to earth in their Abductor craft and, well, abduct. To be specific, they abduct human beings. They subject us to bizarre and gruesome experiments, including, as the UFOpaedia says, "strange genetic experiments and impregnating with alien fetuses." Often, governments whose citizens have been abducted decrease their spending on X-COM. Stop an abduction mission and you'll do your soul a world of good.

BASE BUILDING

When aliens wish to construct a base, they reconnoiter the area with scout ships, then they send supply ships and a battleship into the region to construct the underground site. Supply ships appear periodically to resupply the base, which acts as a headquarters for additional alien activity. The effect of bases is to cause great anxiety among governments in the area. Governments significantly decrease their funding of X-COM when they discover bases nearby.

TIP

X-COM agents sometimes detect bases automatically, but you can find them yourself. To do so, determine where alien activity (but not UFO activity) is high, and then send interceptors to patrol the area.

HARVEST MISSIONS

Harvest missions take place in rural areas. In a harvest mission, aliens take species of flora and fauna from the earth and subject them to testing. The thinking behind harvest missions is that the earth was originally seeded by aliens, who are now returning to "reap the harvest they have sown" (UFOpaedia). Whatever the real case, harvest missions cause conniptions among governments and people, and must be stopped quickly.

INFILTRATIONS

No matter how well you do in this game, at some point you're bound to read in your month-end report that a government has signed a pact with the aliens. In such a pact, aliens are allowed to continue their activities completely unimpeded. In return, the government is given details about alien technology.

As far as you're concerned, a successful infiltration means that funding from the government involved ceases immediately. In an infiltration mission, aliens who look like humans infiltrate governments and put these pacts in gear.

RESEARCH MISSIONS

Research missions aren't worth worrying about. They involve small craft and take place in out-of-the-way areas. They must be stopped, however, because alien research leads to alien development. Research missions often precede more dangerous missions, such as terror or basing missions.

RETALIATIONS

Aliens aren't much for fair play. They consider it wrong of you to keep shooting their UFOs out of the sky. They despise you if you take out their bases and stop their terror attacks. If you're too successful, the aliens will launch a retaliation mission against one of your bases. The best defense is to construct shields so that they can't even find your bases, but if you want to capture materials, artifacts, and aliens themselves, by all means let them come.

SUPPLY MISSIONS

Alien bases have to be supplied. Apparently, they can't get everything they need from their local supermarket and hardware store, so about once a month each base is visited by a supply ship. If you can detect supply ships and watch where they land, you should be able to find a base close by.

TERROR MISSIONS

The aliens are very much aware that you depend on government funding for X-COM's existence. As a result, they frequently send in special troops to terrorize large populations and cause hysteria, the idea being to make a government cut its X-COM funding. Terror missions show up as terror sites in X-COM, and you'll encounter several throughout the game.

IDENTIFYING ALIEN AIRCRAFT

You don't have a great many ships to work with in X-COM, but the aliens do. In fact, they have eight (you end up with five after stealing their technology). Alien ships range from the small scout through the battleship in size and power, and recognizing them is important to your overall strategy.

The eight craft are described below, organized alphabetically.

Abductor The Abductor is used, as you might expect, in abduction missions. In an Abductor, the aliens perform terrifying experiments on humans they've captured. This type of ship feels extremely good to get rid of.

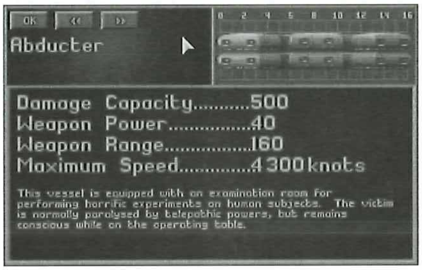
Mission Type: Abduction

Damage Capacity: 500

Weapon Power: 40

Weapon Range: 160

Max. Speed: 4300



Abducter

Damage Capacity..........500
Weapon Power...............40
Weapon Range...............160
Maximum Speed.............4300knots

This vessel is equipped with an examination room for performing horrific experiments on human subjects. The victim is normally paralysed by telepathic powers, but remains conscious while on the operating table.

Battleship The most powerful of the alien ships, the Battleship is used in several different missions. If you find one intact, you're in for the fight of your life, but the rewards of capturing one are immense. Among them is the possibility of capturing both a leader and a commander, as well as numerous artifacts and components, weapons, and the all-important Elerium-115.

Mission Type: Basing, Infiltration, Retaliation

Damage Capacity: 3000

Weapon Power: 140

Weapon Range: 520

Max. Speed: 5000

Harvester Nothing particularly interesting about Harvesters, except that on-board you'll find experiments on animals (quite gruesome, really).

Mission Type: Harvest

Damage Capacity: 500

Weapon Power: 40

Weapon Range: 176

Max. Speed: 4000

Large Scout The Large Scout is a large research vessel whose presence often heralds the appearance of a more dangerous mission. Shooting down Large Scouts over water is almost always a good idea, especially later in the game.

Mission Type: Research

Damage Capacity: 250

Weapon Power: 20

Weapon Range: 272

Max. Speed: 2700

Medium Scout The Medium Scout is often followed by a visit from a Large Scout, and usually only after a Small Scout has softened up the playing field somewhat.

Mission Type: Research

Damage Capacity: 200

Weapon Power: 20

Weapon Range: 120

Max. Speed: 2400

Small Scout The Small Scout is the only ship you can easily shoot down with your puny weapons early in the game. Small Scouts are dangerous only because they precede larger craft and larger missions. They won't shoot you down.

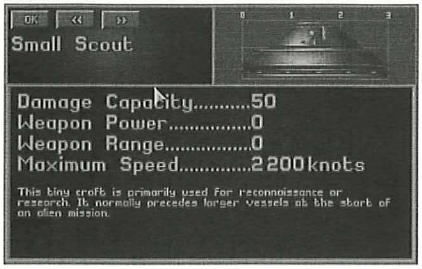
Mission Type: Research

Damage Capacity: 50

Weapon Power: 0

Weapon Range: 0

Max. Speed: 2200



Small Scout

Damage Capacity..........50
Weapon Power................0
Weapon Range................0
Maximum Speed.............2200knots

This tiny craft is primarily used for reconnaissance or research. It normally precedes larger vessels at the start of an alien mission.

Supply Ship If you find a Supply ship, force it to land rather than shooting it down. Supply ships are not particularly powerful, so you won't likely get wiped out trying to take them, and they offer a large amount of equipment and artifacts. Well worth the effort.

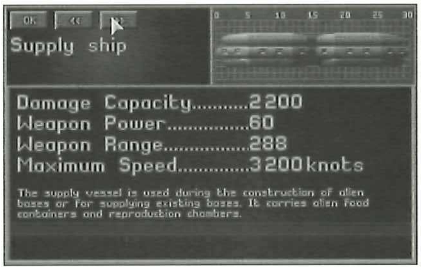
Mission Type: Supply

Damage Capacity: 2200

Weapon Power: 60

Weapon Range: 288

Max. Speed: 3200



Supply ship

Damage Capacity..........2200
Weapon Power................60
Weapon Range................288
Maximum Speed.............3200 knots

The supply vessel is used during the construction of alien bases or for supplying existing bases. It carries alien food containers and reproduction chambers.

Terror Ship The Terror ship is used, as you'd expect, to launch a terror mission. You'll find alien terrorists on these ships, and they're excellent ones to shoot down for obvious reasons.

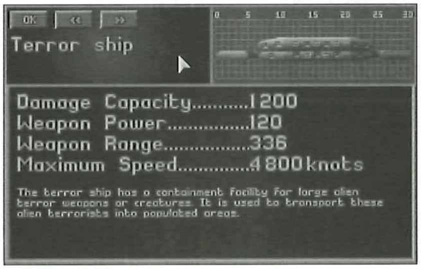
Mission Type: Terror

Damage Capacity: 1200

Weapon Power: 120

Weapon Range: 336

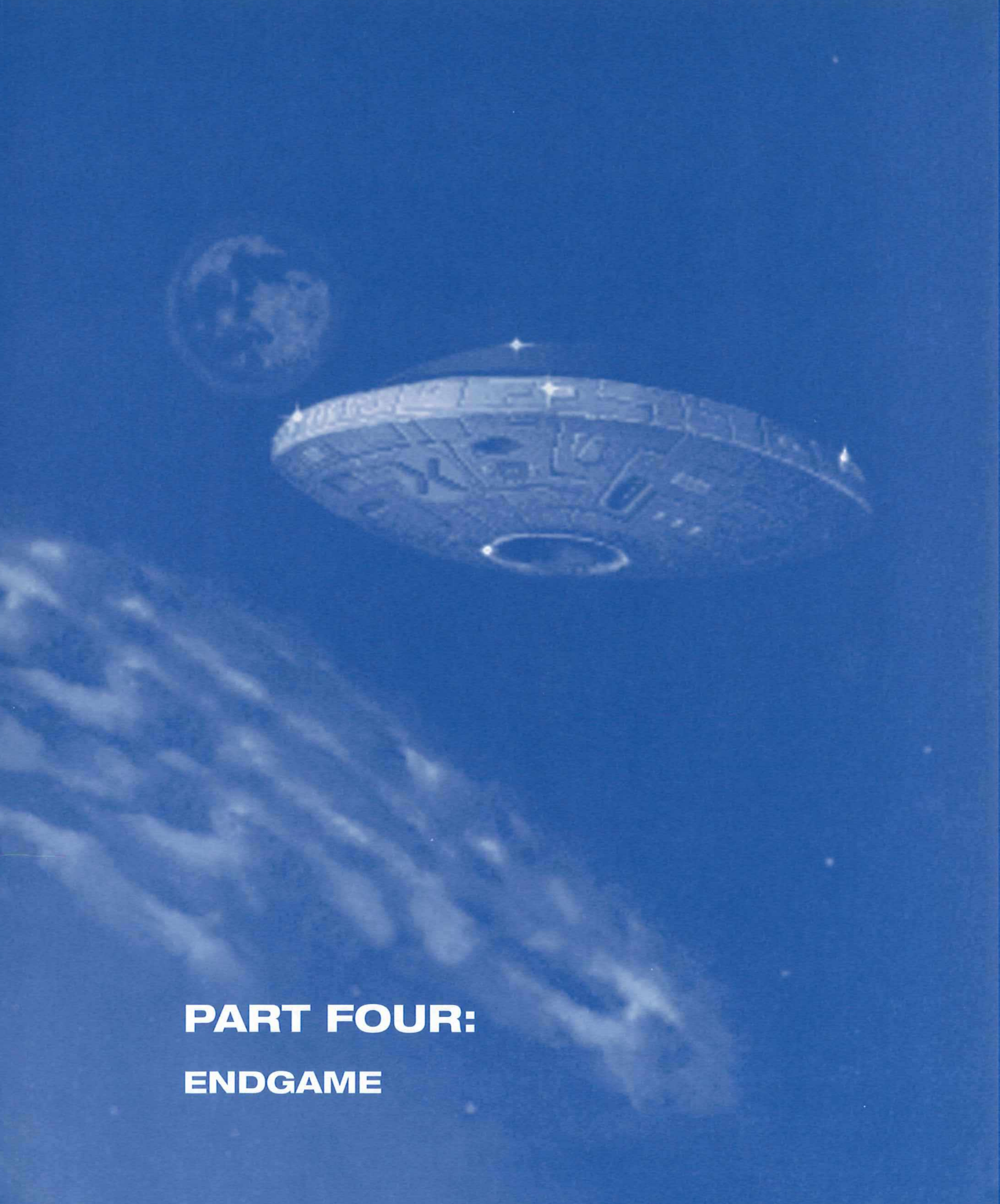
Max. Speed: 4800



Terror ship

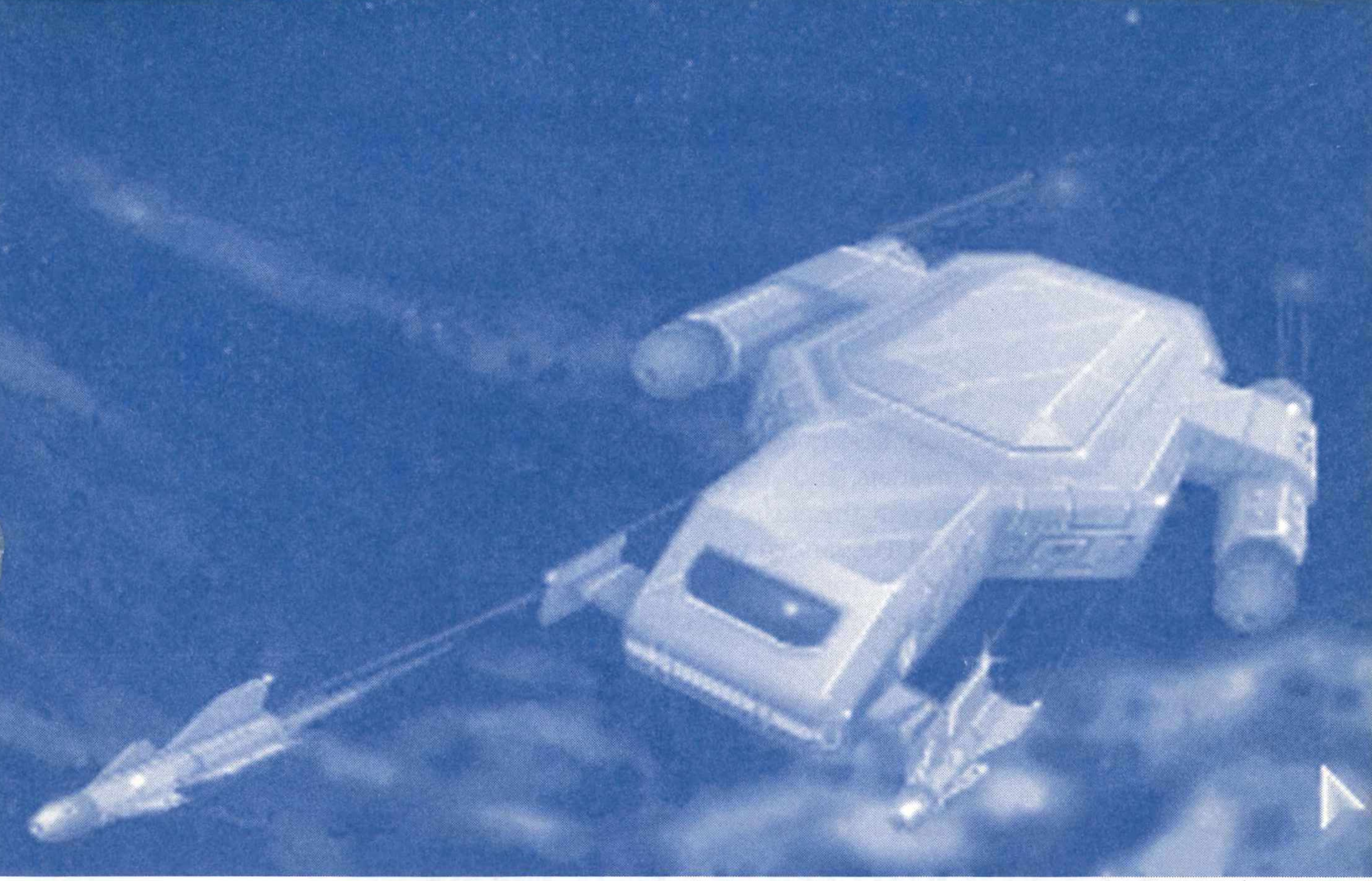
Damage Capacity..........1200
Weapon Power................120
Weapon Range................336
Maximum Speed.............4800 knots

The terror ship has a containment facility for large alien terror weapons or creatures. It is used to transport these alien terrorists into populated areas.



PART FOUR:

ENDGAME



CHAPTER TEN

HOW TO WIN AT X-COM

TEN

All right, you've done it. You've mastered the game and you're ready to get on with the conclusion. Research has gone well, you've kept the earth reasonably clear of invaders, and your bases have multiplied and expanded in an effort to prevent the entire planet from panicking. You've shot down UFO after UFO, landed your assault craft and efficiently disposed of the aliens. Terror sites have fallen to your increasingly well-armed squads. Even the enemy bases can't survive your expertly planned assaults.

So why do the aliens keep coming, wave after wave after wave? What, exactly, do you still have left to do?

WARNING: YOU MIGHT NOT WANT TO READ THIS CHAPTER!

Read this chapter under advisement. It gives away the end of the game. If you're having trouble ending a game, by all means keep reading. But if you like to solve things on your own, *stop reading right now!*

CAPTURE, SALVAGE, INTERROGATE

The road to the final mission begins relatively early in the game. In order to learn how to end the game, you have to capture aliens rather than kill them. Then, once you've taken them back to base, you have to interrogate them to get the key information you require.

You also have to assault intact landing sites and alien bases in order to salvage essential materials. You need as many alien alloys and UFO components—UFO Navigation, UFO Power Source—as you can get your hands on. You need Elerium-115. This stuff can only be acquired over time, so it's best to get started early.

THE TWO ESSENTIAL PIECES OF THE PUZZLE

To win a game, you must manufacture an Avenger aircraft and you must research the Cydonia or Bust research item. Once you've done that, you can fly the Avenger to Cydonia (the alien home base) and defeat the alien brain that controls all alien activity.

THE AVENGER

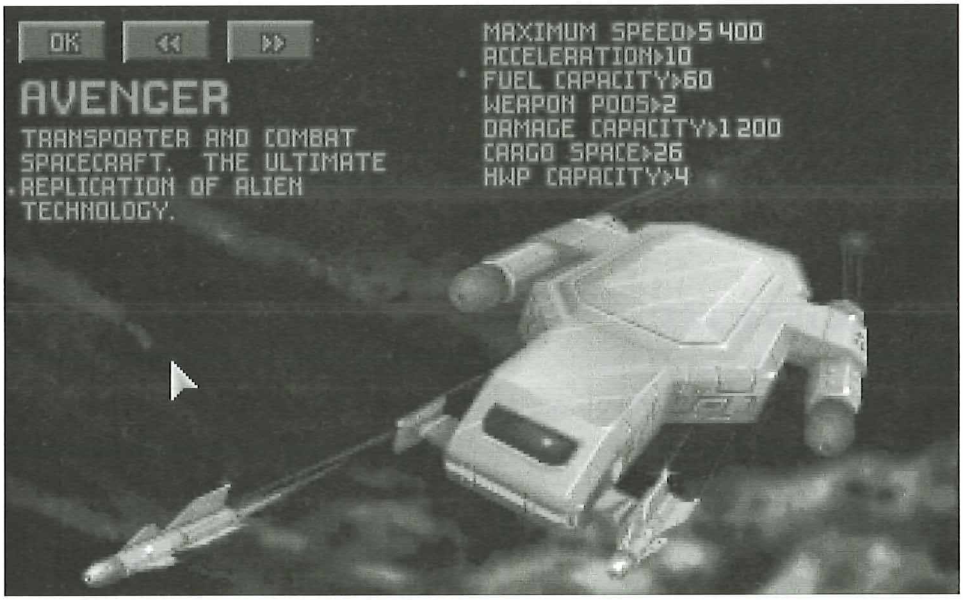
If you've read *X-COM Strategies & Secrets* to this point, it should hardly be a surprise by now that you need an Avenger aircraft to win the game. I've mentioned it half a dozen times or so (in the previous paragraph, for instance). But acquiring the necessary know-how to manufacture the Avenger takes a great deal of time and effort, a point that can't be emphasized enough. Get started early. Otherwise, the aliens will take out your home bases while your scientists and manufacturers race against the clock to build the Avenger.

To reach the stage where you can research the Avenger, you need to have completed research on the following items:

- Alien alloys
- Elerium-115
- UFO Power Source
- UFO Navigation
- UFO Construction
- The Firestorm
- The Lightning

Once you've done that, you can research the Avenger. When you do, you'll be presented with the research results window shown in Figure 10.1.

The Avenger is an extremely useful air-to-air combat weapon. Start producing it even before you have the other endgame element in place, Cydonia or Bust.



AVENGER

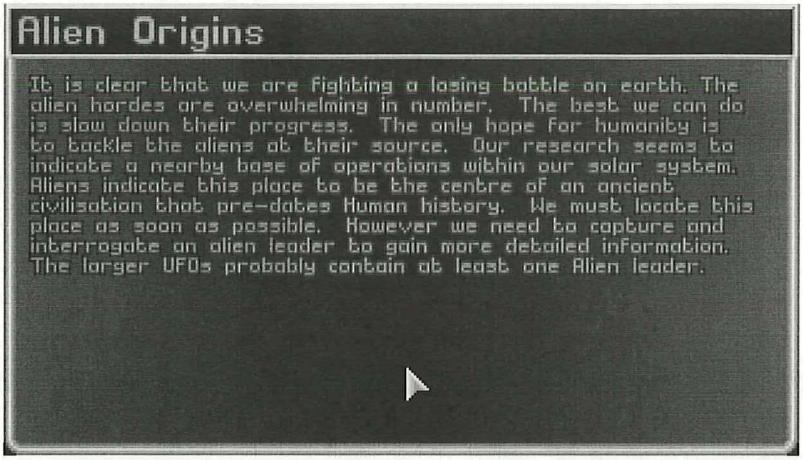
TRANSPORTER AND COMBAT SPACECRAFT. THE ULTIMATE REPLICATION OF ALIEN TECHNOLOGY.

MAXIMUM SPEED>5 400
ACCELERATION>10
FUEL CAPACITY>60
WEAPON PODS>2
DAMAGE CAPACITY>1 200
CARGO SPACE>26
HWP CAPACITY>4

FIGURE 1.0 *The Avenger, the "ultimate craft"*

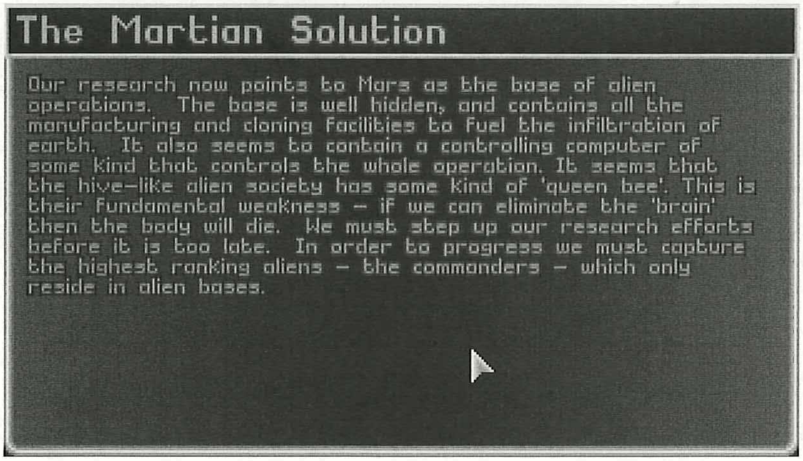
CYDONIA OR BUST

To enter the final mission, you have to research the Cydonia or Bust item. Before doing so, however, you're almost certain to go through Alien Origins and The Martian Solution. You'll discover these two items when you interrogate aliens. Only one research item remains after you've researched Alien Origins and the Martian Solution—Cydonia or Bust.



Alien Origins

It is clear that we are fighting a losing battle on earth. The alien hordes are overwhelming in number. The best we can do is slow down their progress. The only hope for humanity is to tackle the aliens at their source. Our research seems to indicate a nearby base of operations within our solar system. Aliens indicate this place to be the centre of an ancient civilisation that pre-dates Human history. We must locate this place as soon as possible. However we need to capture and interrogate an alien leader to gain more detailed information. The larger UFOs probably contain at least one Alien leader.



The Martian Solution

Our research now points to Mars as the base of alien operations. The base is well hidden, and contains all the manufacturing and cloning facilities to fuel the infiltration of earth. It also seems to contain a controlling computer of some kind that controls the whole operation. It seems that the hive-like alien society has some kind of 'queen bee'. This is their fundamental weakness - if we can eliminate the 'brain' then the body will die. We must step up our research efforts before it is too late. In order to progress we must capture the highest ranking aliens - the commanders - which only reside in alien bases.

CAPTURING AN ALIEN COMMANDER

Cydonia or Bust is available only through research. In order to acquire it, you must capture a live alien commander. Leaders won't do, only commanders, and both are rare and extremely difficult to find. They accompany invasions of X-COM bases at times, and they're present in alien bases as well. You can occasionally find them on Very Large UFOs.

The problem is capturing them. Because they can be found only on large alien sites, the defenses surrounding commanders are extremely strong. Not only do you have to find your way to a control site, you have to fight your way past a significant number of well-armed enemies to reach commanders. And when you reach them, you have to stun instead of kill the creatures.

If you don't have an empty alien containment facility already built and you capture a commander, he will die when you return to base. The number of things that can go wrong, in fact, is so great that planning is often the key to making the capture possible.

YOU CAN'T CAPTURE COMMANDERS EARLY ON

Capturing a commander early in the game is practically impossible. It's too hard to get through alien defenses, much less worry about how to stun the commander instead of killing him. Besides, in the early going you won't have anything but stun rods to work with. When stun bombs become available, you can use them to stun a commander, but even then the right soldier must be present with stun bombs loaded. It takes planning, and it takes self-control.

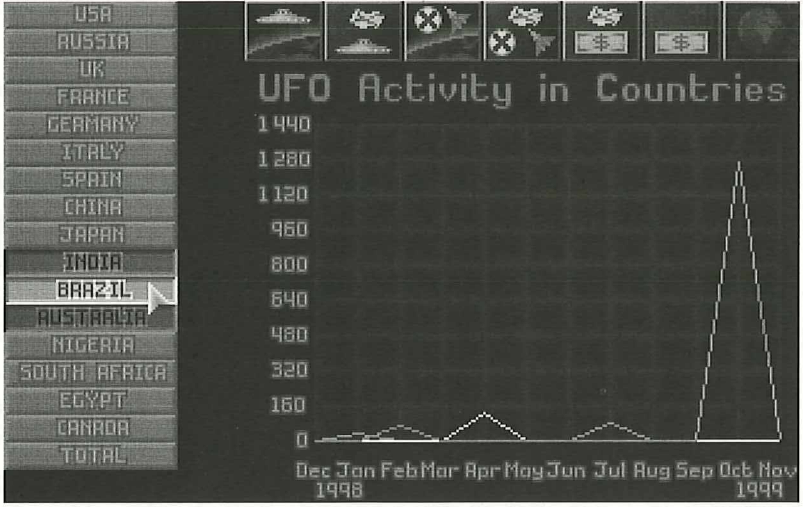
HOW TO BAG AN ALIEN COMMANDER

Here are step-by-step guidelines for capturing an alien commander:

1. Have an alien containment facility available at the base.

Be sure there is plenty of space for captured aliens. In all likelihood, you will bring back more than just the commander, and you don't want him to be the odd man out when it comes to available space. He will die unless you place him immediately in a containment facility.

2. Check the UFO Activity Graph, by region or country, from the Graphs menu on the Global Display, to see where recent alien activity has been occurring. Here you see a graph of recent activity in Brazil:


USA
RUSSIA
UK
FRANCE
GERMANY
ITALY
SPAIN
CHINA
JAPAN
INDIA
BRAZIL
AUSTRALIA
NIGERIA
SOUTH AFRICA
EGYPT
CANADA
TOTAL
UFO Activity in Countries
1440
1280
1120
960
800
640
480
320
160
0
Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov
1998
1999

3. Using the UFO Activity Graph as a basis, begin an extensive patrol of various parts of the world. Your objective is to locate an alien base where you'll be sure to find a commander.
4. While searching for the base, be sure your crew is well-armed and healthy. Acquire the best weapons and armor, and place them on the transport with the crew. Equip at least three crew members, preferably more, with stun bombs and small launchers. Be sure everyone has a heavy plasma weapon with extra ammo clips.
5. When you've located a base, fly the transport to the site using the Intercept routine.
6. Land and begin fighting.

Command the best tactical combat of your life. Keep your crew together, and send spotters throughout the base to find enemies. Move as quickly as possible to the central command rooms. Usually they're located through large double doors near the middle of the base.

7 As you approach the command area, stun rather than kill.

You simply can't know whether the commander is inside that structure. Continue to stun as you move to the main command room. Check each stunned alien (by picking it up) to see whether or not you've got the one you need. Once you do, blow away the rest.

8 Finish the battle, and head back to base with your commander.

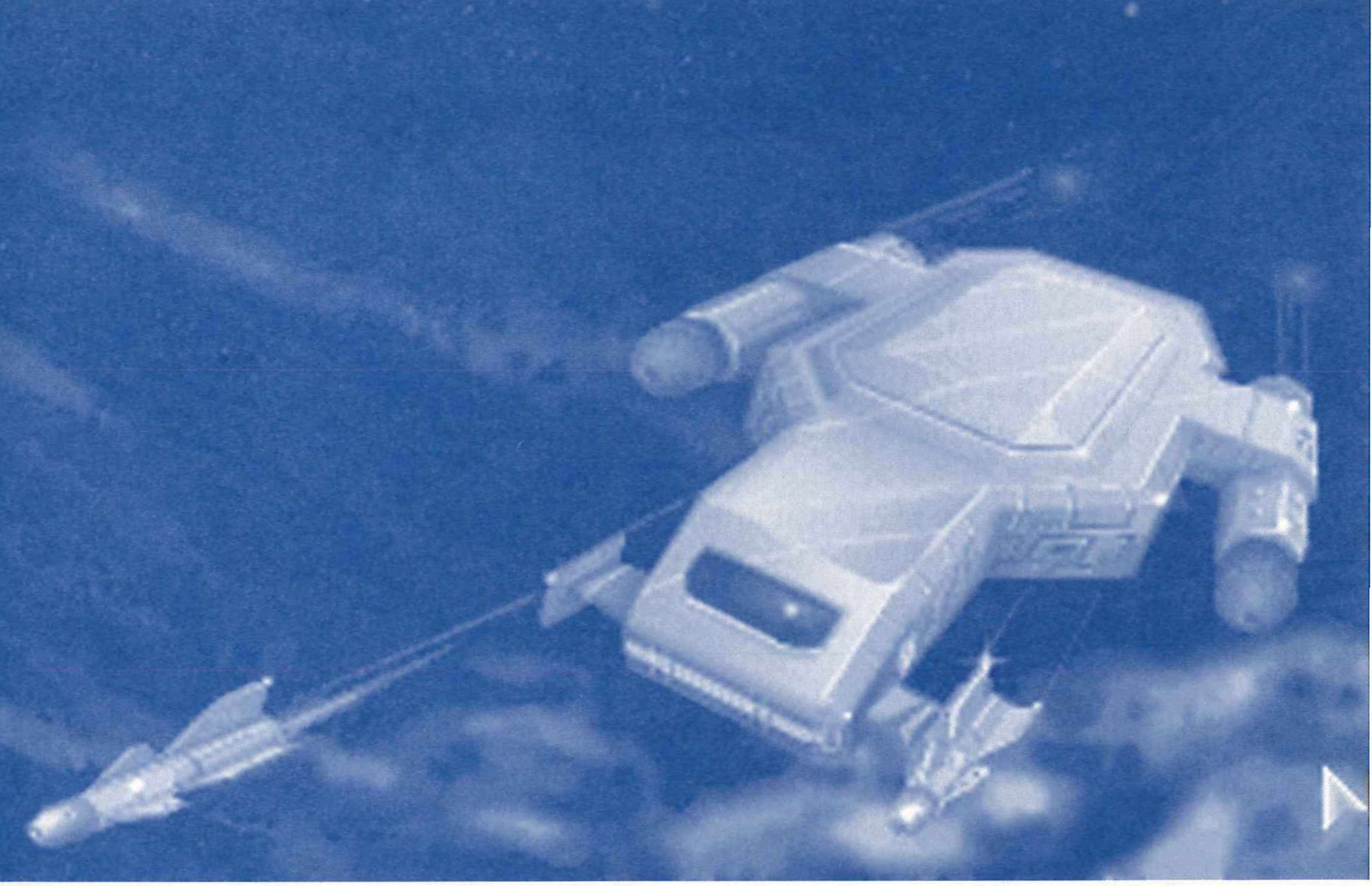
INTERROGATING AN ALIEN COMMANDER

Once you're back on base, give the commander to your researchers for interrogation. When they've completed their task, you'll see the Cydonia or Bust research item displayed when you click View Reports. It tells you what you need to do:

> It is now clear that the alien hordes are being controlled from an underground base in Cydonia—which is an unusual area of Mars featuring five-sided pyramids and a large formation resembling a human face. Cydonian civilization once flourished on Mars many millions of years ago, but we do not know why it died out, or what the connection is with the latest alien activity there. Whatever the explanation, we must send an expedition to Cydonia. This is the only way that we can defeat the aliens. We must destroy the controlling master "brain." We will need an Avenger craft equipped with the most awesome destructive power at our disposal. There is nothing more we can learn here—we must await the outcome of the Cydonian assault.

There is nothing more to be done on earth. More UFOs will appear, and more sites will need to be cleared out. Aliens will strive to capture your bases. You can produce materials and weapons from this point to eternity. Until you launch the Cydonian mission, which ends the game one way or the other, everything you do, for all practical purposes, is essentially meaningless.

On to Chapter 11, where Cydonia awaits....



CHAPTER ELEVEN

FINAL VOYAGE AND FINAL BATTLE

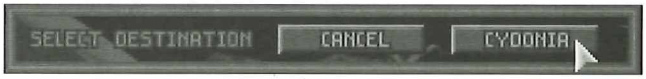
This is it. The ending. Once again, if you want to figure out the ending yourself, *stop reading now!* But if you want to see what happens, this is the place to be.

First a word of warning. If you've come to this chapter on the verge of the final battle, your battle will be different from the one described here. Only the final few screens will look the same. Whether or not you make it that far depends on your skills and the abilities of your soldiers. Good luck.

LAUNCHING THE CYDONIAN MISSION

The mission actually begins when you discover the Cydonia or Bust research item and you realize that you have to mount an expedition to Cydonia. Once the Avenger and its crew are ready, launch the flight through the Interception button on the Global Display. No other ship may accompany the Avenger.

For the first time in the game, the interception procedure yields a new Select Destination window with a brand-new button on it labeled Cydonia. Obviously that's where you want to go, so press that button now.



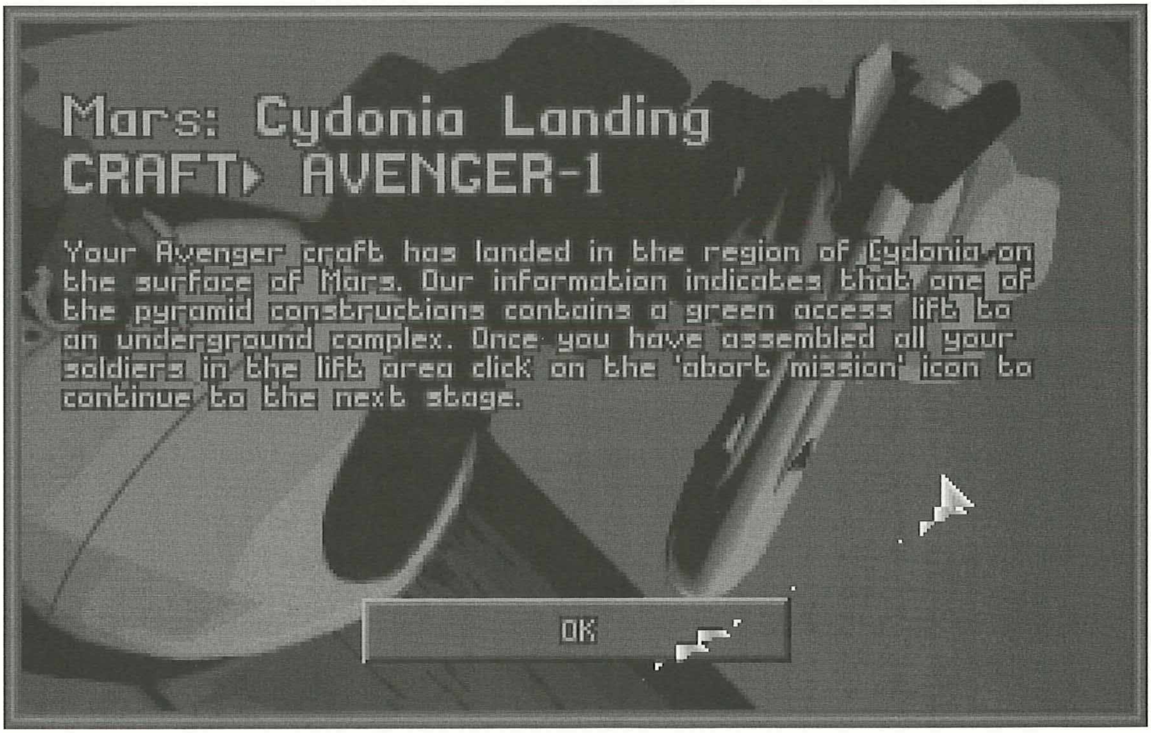
When you click the Cydonia button, a bright red window appears and asks point-blank if you really want to start the mission. Why does this window appear? Because, quite simply, there's no way out. Once you click the Yes button from this screen, the game is effectively over. You'll either win or you'll lose, but you can't go back again.

WARNING

Once you click the Yes button to start the Cydonia mission, there's no turning back. You either win or lose the game.

ARRIVING AT CYDONIA

As soon as you make the choice to complete the game, Figure 11.1 appears. It tells you that you've arrived at Cydonia and gives you some final instructions.



Mars: Cydonia Landing
CRAFT▸ AVENGER-1

Your Avenger craft has landed in the region of Cydonia on the surface of Mars. Our information indicates that one of the pyramid constructions contains a green access lift to an underground complex. Once you have assembled all your soldiers in the lift area click on the 'abort mission' icon to continue to the next stage.

FIGURE 11.1 *The final screen before the battle for Cydonia begins*

Two crucially important pieces of information are displayed here. If you miss them, you won't know what to do (an extremely bad design flaw, one of the few in the game). Here they are, in case you do manage to miss or forget them:

- One of the pyramid constructions contains a green access lift to an underground complex.
- Once you have assembled all your soldiers in the lift area of the complex, click on the Abort Mission button to continue to the next stage.

First, you must find the pyramid with the green access area in Cydonia. There are numerous pyramids to wade through, and several deadly aliens who don't want you on their planet. Be aware that the access area is located in a pyramid to the front of the Avenger. You don't need to take out the rest of the pyramids.

Second, this is a two-stage battle. After working your way through the pyramids and into the access area, you must abort the mission in order to move to the next stage. Why the designers didn't include a separate routine for this is a mystery, since aborting the mission seems the last thing you would want to do at this stage. Still, that's what must be done, so be prepared for it.

THE BATTLE AMONG THE PYRAMIDS

Now the fight begins. Your small but superbly trained and battle-hardened crew assembles in the rear of the Avenger and steps onto the Cydonian landscape. Immediately ahead is a pyramid with a door carved in its side, and no aliens are yet in sight. In Figure 11.2 (left side), the leader of the crew, Maria Sharpe, has stepped onto the planet and moved towards the pyramid. When everyone gets off the Avenger (there's no point leaving anyone behind to protect it), the first turn ends. Examining the overhead map on the right side of Figure 11.2, you can see craters and doors into pyramids. Who knows what else is out there?

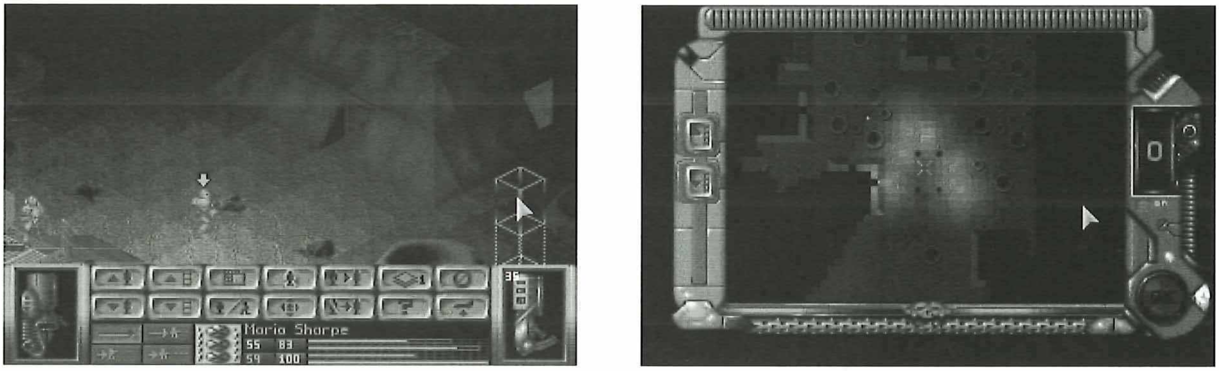
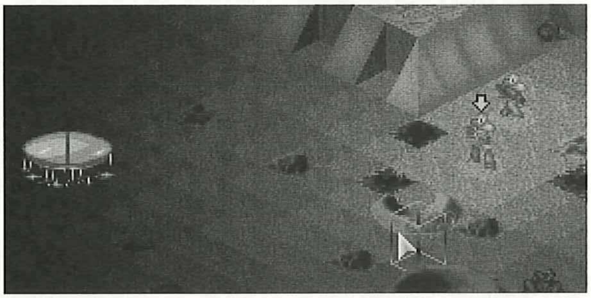


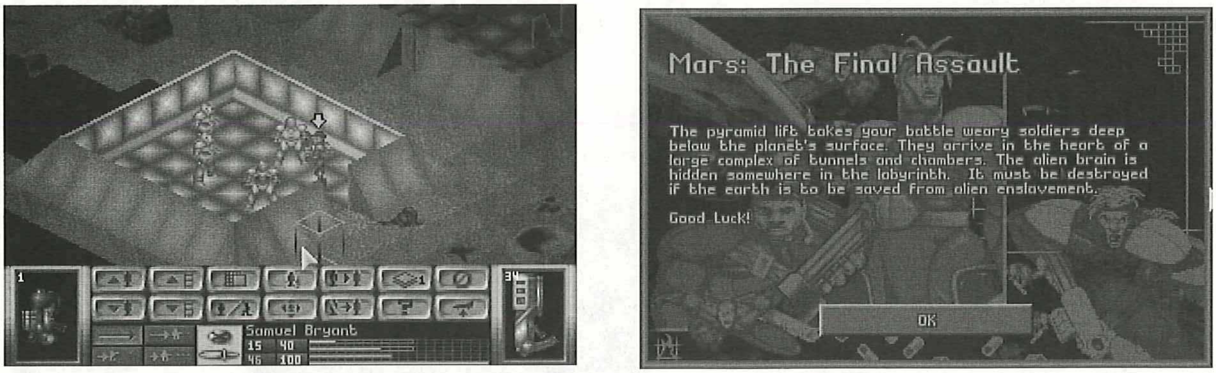
FIGURE 11.2 *Moving closer to the pyramid (left) and an overhead map at the end of first turn (right)*

Shortly into the battle, a Cyberdisc appears. It's deadly, and it's already killed one of the crew. Frank Jones faces it now, and he'll fire first, drawing others into the fray.



Now the green access area comes into view. Unfortunately, so have two aliens, both armed and ready to protect their access lift. Another showdown begins.

All aboard? You're off. In Figure 11.3 (left side), the five remaining crew members have reached the green access area. As the instructions told us at the start of the battle, it's time to click the Abort Mission button. Doing so displays a Mars: The Final Assault window, as shown on the right side of Figure 11.3. Now you're going to the final confrontation at the Cydonian Base.



Mars: The Final Assault

The pyramid lift takes your battle weary soldiers deep below the planet's surface. They arrive in the heart of a large complex of tunnels and chambers. The alien brain is hidden somewhere in the labyrinth. It must be destroyed if the earth is to be saved from alien enslavement.

Good Luck!

FIGURE 11.3 *The remaining crew members in the access area (left) and the information screen leading to the final battle (right)*

THE CYDONIAN BASE

The Cydonian Base itself is similar to all other bases. Figure 11.4 (left side) shows a view of an experimentation room. Notice that the walls and other artifacts look similar to those in bases the aliens established on earth.

Even the aliens themselves are no different. On the right side of Figure 11.4 you can see a soldier taking out one of the aliens' great mind-control specialists. The soldier does not fire at the creature itself but rather at one of the red globes nearby. The figure shows the beginning of an explosion.

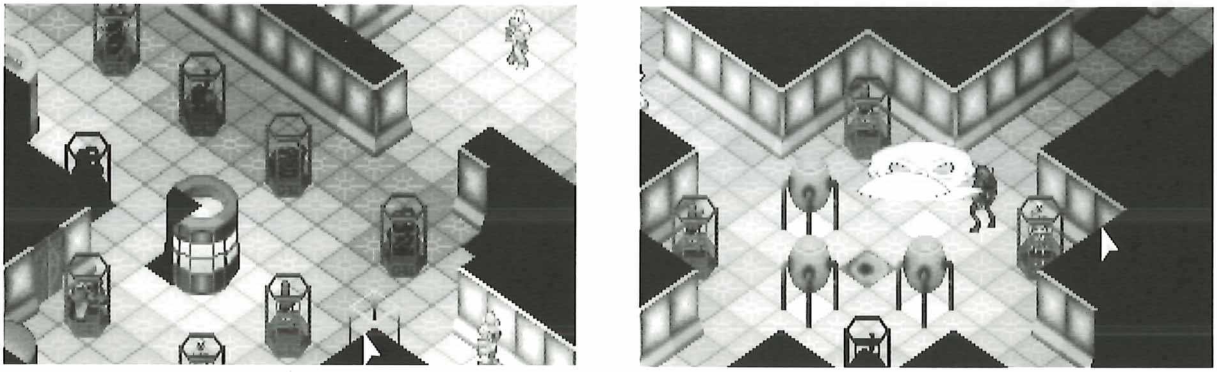
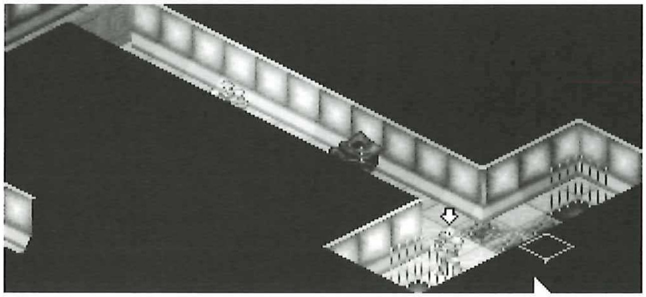


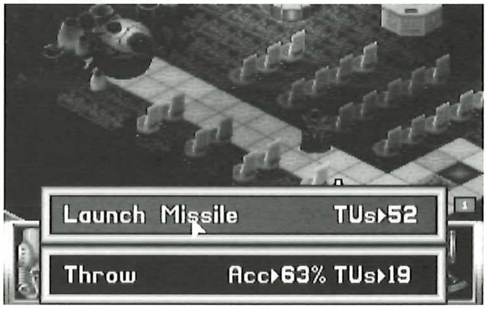
FIGURE 11.4 *View of a chamber inside the Cydonian Base (left) and a soldier detonating an alien globe (right)*

Because of the deteriorating health of the crew, you race through the corridors looking for the control area. The corridors are different from the rest of the Cydonian Base. Instead of a central complex, a long corridor leads to two red lifts, or elevators. Here we see Maria Sharpe, the leader of the crew, about to step onto the lift. Behind her is a slumped alien, and further back is a crew member who has come under alien control. Things are clearly desperate.



ENDGAME

At the top of the lift, three hooded aliens await. More importantly by far, *the alien brain itself* appears at the top of the display. Our soldier is hurt, but at last the end is in sight. If only she can survive the showdown with the robed creatures, maybe she'll have a chance to destroy the aliens once and for all.



Sharpe has survived, but there's no time for small arms now. In her possession is a blaster launcher, and it's armed and ready to fire. This screen shows her preparing to launch the missile.

Where will she fire it? Straight at the alien brain, no detours and no way points. One shot is all she'll have, since two hooded aliens remain alive and ready to kill her.

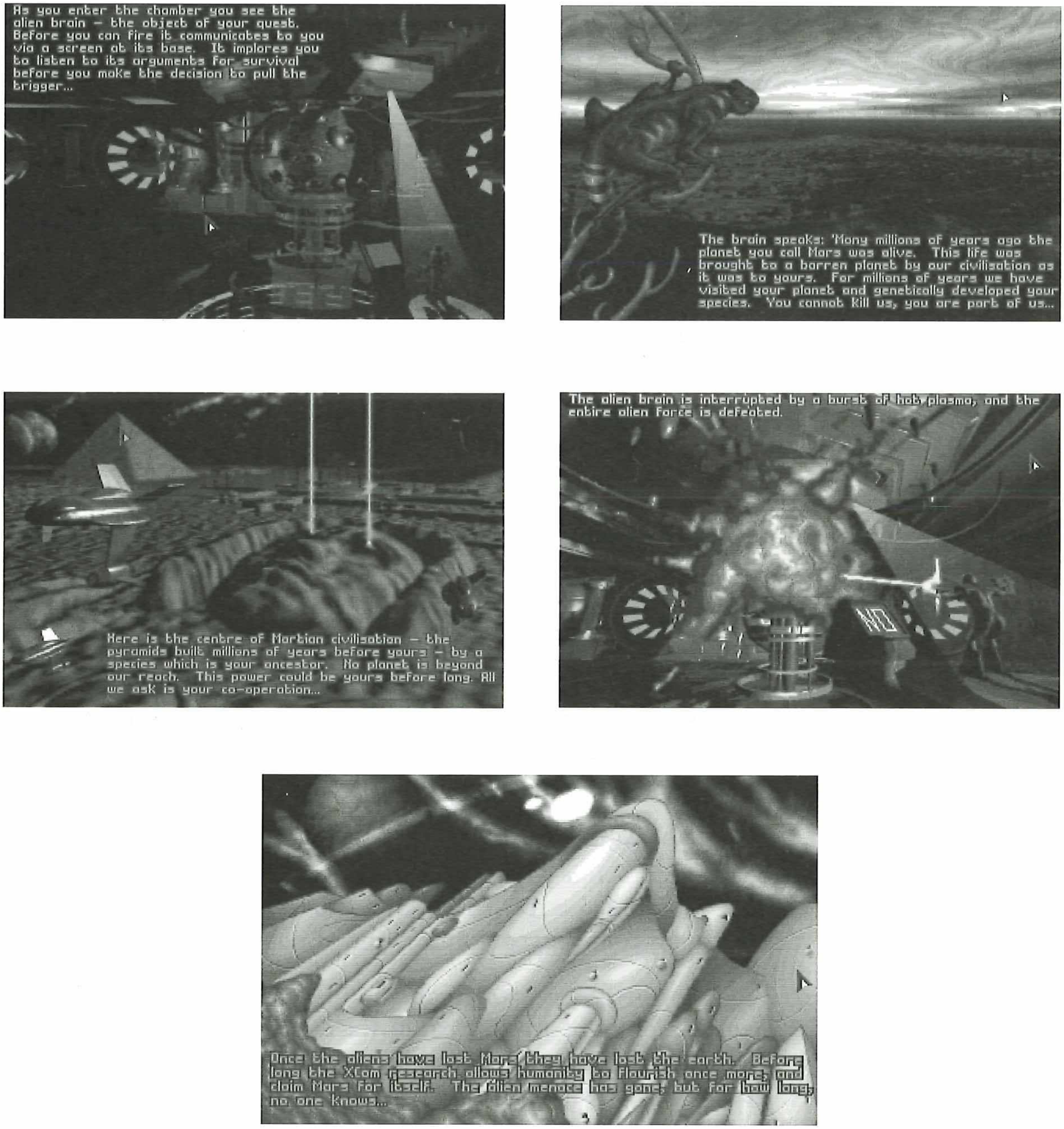
She aims and blasts, and after explosion upon explosion, the alien brain is near death. All that remains is the end.

Figure 11.5 shows the last five screens of the game. The full text of the screens is reprinted below. You have no control over these screens. The game is over. All you can do now is watch.

First, the alien brain tries to convince Sharpe to let it live. The reason is clear from the first three screens:

> As you enter the chamber you see the alien brain—the object of your quest. Before you can fire, it communicates to you via a screen at its base. It implores you to listen to its arguments for survival before you make the decision to pull the trigger.
>
> The brain speaks: "Many millions of years ago the planet you call Mars was alive. This life was brought to a barren planet by our civilization as it was to yours. For millions of years we have visited your planet and genetically developed your species. You cannot kill us, you are part of us..."
>
> "Here is the center of Martian civilization—the pyramids built millions of years before yours—by a species which is your ancestor. No planet is beyond our reach. This power could be yours before long. All we ask is your cooperation..."

It all sounds convincing, perhaps, but not to our battle-hardened soldier. After the months of grueling battle, the destruction to the earth and its inhabitants, the ghastly experiments, and the relentless terror, nothing the brain can say will change her mind.



As you enter the chamber you see the alien brain – the object of your quest. Before you can fire it communicates to you via a screen at its base. It implores you to listen to its arguments for survival before you make the decision to pull the trigger...

The brain speaks: 'Many millions of years ago the planet you call Mars was alive. This life was brought to a barren planet by our civilisation as it was to yours. For millions of years we have visited your planet and genetically developed your species. You cannot kill us, you are part of us...

Here is the centre of Martian civilisation – the pyramids built millions of years before yours – by a species which is your ancestor. No planet is beyond our reach. This power could be yours before long. All we ask is your co-operation...

The alien brain is interrupted by a burst of hot plasma, and the entire alien force is defeated.

Once the aliens have lost Mars they have lost the earth. Before long the XCom research allows humanity to flourish once more and claim Mars for itself. The alien menace has gone, but for how long, no one knows...

FIGURE 11.5 *The last five screens*

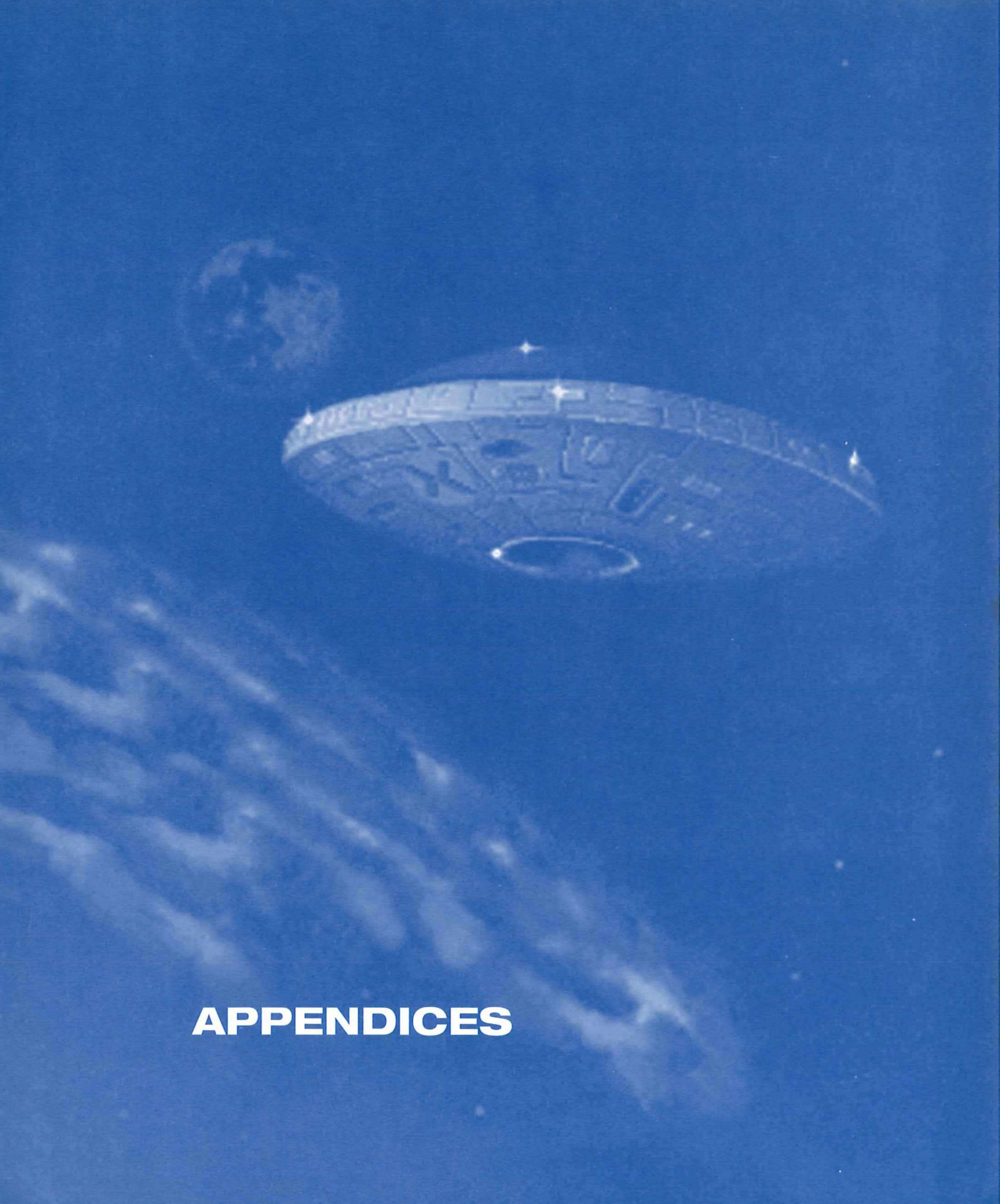
The fourth screen says:

> The alien brain is interrupted by a burst of hot plasma, and the entire alien force is defeated.

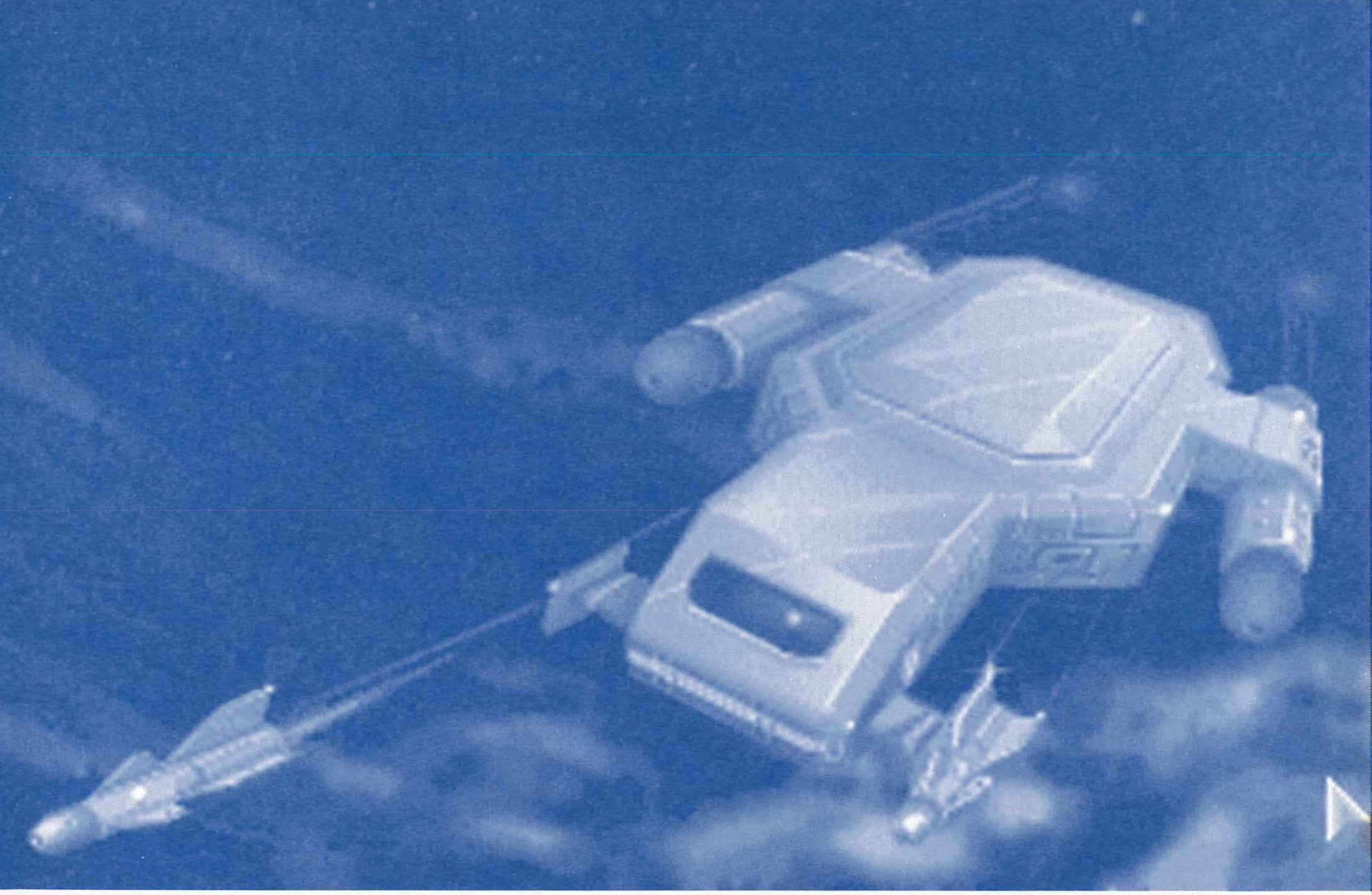
And the fifth screen:

> Once the aliens have lost Mars they have lost the earth. Before long the X-COM research allows humanity to flourish once more, and claim Mars for itself. The alien menace has gone, but for how long, no one knows…

It's over. You've defeated X-COM. But the game is rich enough to play again and again. Different levels, different strategies, all await as you begin from the beginning. Good luck, and may you see these final screens again.



APPENDICES



APPENDIX A

READING THE CHARTS AND TABLES

APPENDIX A

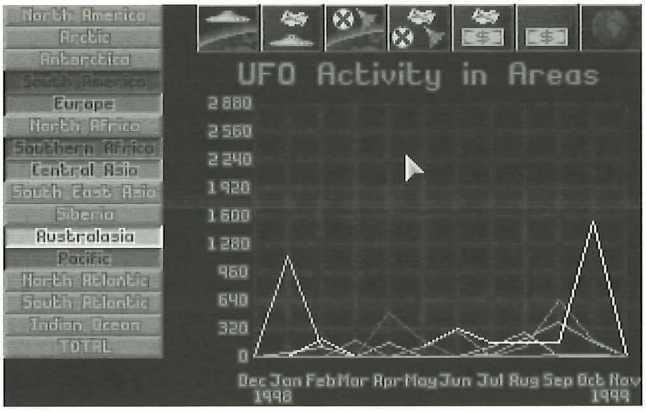
The primary source for informational charts and tables is the Global Display. By pressing the Graphs button, you can get to several charts that are well worth examining. Another is the Base Display, where pressing the Base Information button yields a smaller amount of information. Other charts and tables are available through the UFOpaedia and the Tactical Display. Here, we'll examine only the Global Display (the other graphs are covered elsewhere in this book), because Global Display graphs can help you plan your strategy as the days pass and the alien menace grows.

GRAPHS FROM THE GLOBAL DISPLAY

Six charts are available through the Graphs button on the Global Display. Collectively, they give you a full overview of how the war is progressing.

UFO ACTIVITY IN AREAS

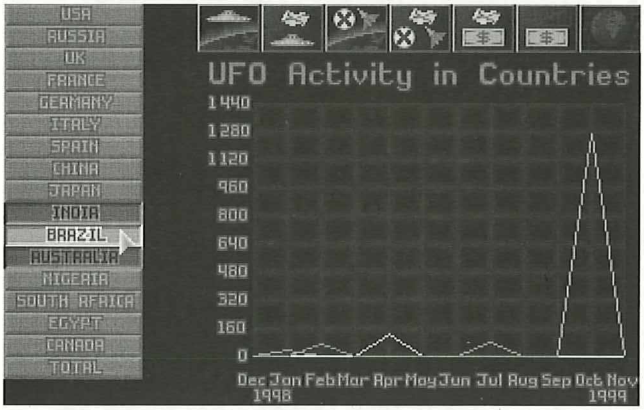
The UFO Activity in Areas graph shows the relative amount of UFO activity in different areas of the world. Notice the button bar on the left side of the graph and the different region names on the buttons. It's not exactly clear what the numbers on the Y-axis of the graph represent, but there's also no real need to know. The important point is that you can judge where activity has occurred, and in what relative amounts.


North America
Arctic
Antarctica
South America
Europe
North Africa
Southern Africa
Central Asia
South East Asia
Siberia
Australasia
Pacific
North Atlantic
South Atlantic
Indian Ocean
TOTAL
$
$
UFO Activity in Areas
2880
2560
2240
1920
1600
1280
960
640
320
0
Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov
1998
1999

In this graph, you can compare and contrast UFO activity in different areas of the world. Here you see UFO activity in six different regions. This graph tells you, essentially, to find out what's happening in Australasia; you're likely to find an alien base, judging by the high activity level there.

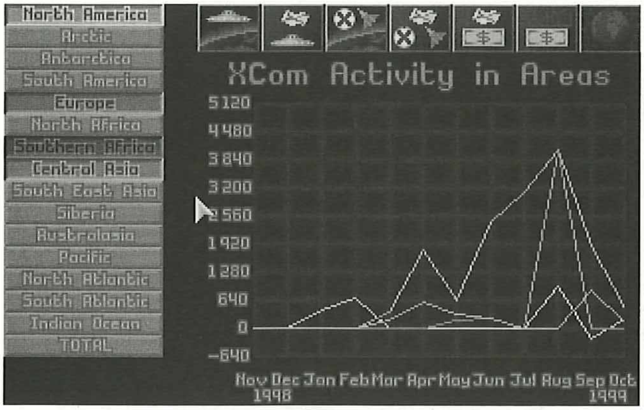
UFO ACTIVITY IN COUNTRIES

The UFO Activities in Countries graph is actually less useful than the UFO Activity in Areas chart. What it is good for is spotting precisely where activity has occurred, which is useful primarily for narrowing down the possibilities for launching a patrol mission to find bases. Note that the countries shown at the left of the chart are those that are currently funding the X-COM project; if a country withdraws from funding, you'll have to resort to the UFO Activity in Areas graph to pinpoint alien actions.


USA
RUSSIA
UK
FRANCE
GERMANY
ITALY
SPAIN
CHINA
JAPAN
INDIA
BRAZIL
AUSTRALIA
NIGERIA
SOUTH AFRICA
EGYPT
CANADA
TOTAL
UFO Activity in Countries
1440
1280
1120
960
800
640
480
320
160
0
Dec 1998
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov 1999

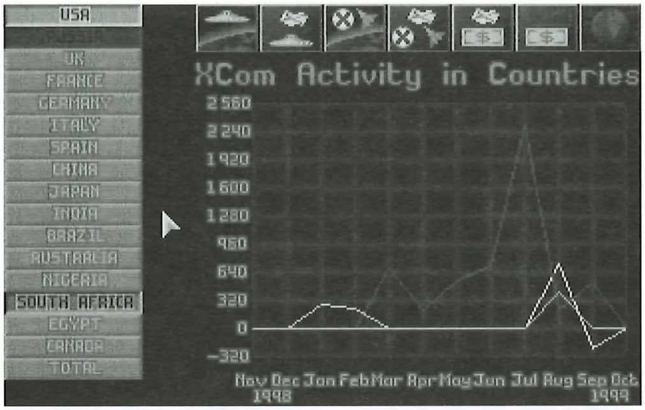
X-COM ACTIVITY IN AREAS

You can also see graphs of X-COM activities in areas. Here we see a graph displaying X-COM activity in four different areas of the world. Again, the scale on the Y-axis isn't important; all that matters is the relative amount of activity going on. This figure shows four areas of activity, with Europe dominating in June, July, and August. Given the fact that X-COM's home base was in the U.S. all this time, this is hardly surprising. Not suprising either is the activity in South Africa in July, where the second base was constructed.


North America
Arctic
Antarctica
South America
Europe
North Africa
Southern Africa
Central Asia
South East Asia
Siberia
Australasia
Pacific
North Atlantic
South Atlantic
Indian Ocean
TOTAL
XCom Activity in Areas
5120
4480
3840
3200
2560
1920
1280
640
0
-640
Nov 1998
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct 1999

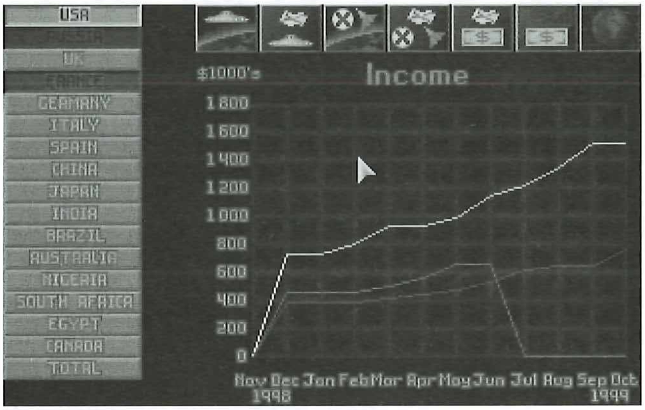
X-COM ACTIVITY IN COUNTRIES

You can also view graphs of X-COM activities in countries. This graph shows activity in South Africa. As you can see, January and February saw activity, as did the summer months.


USA
RUSSIA
UK
FRANCE
GERMANY
ITALY
SPAIN
CHINA
JAPAN
INDIA
BRAZIL
AUSTRALIA
NIGERIA
SOUTH AFRICA
EGYPT
CANADA
TOTAL
XCom Activity in Countries
2560
2240
1920
1600
1280
960
640
320
0
-320
Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct
1998
1999

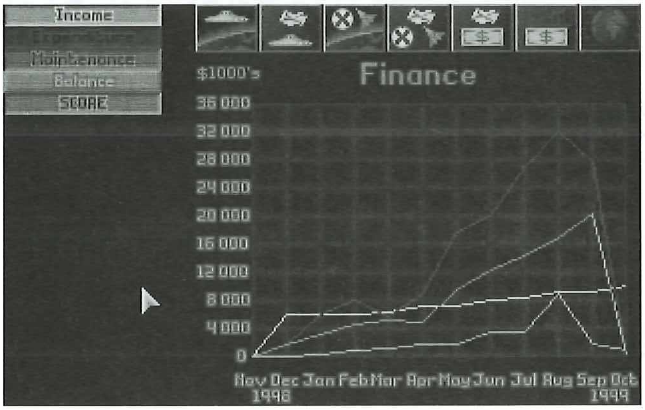
INCOME

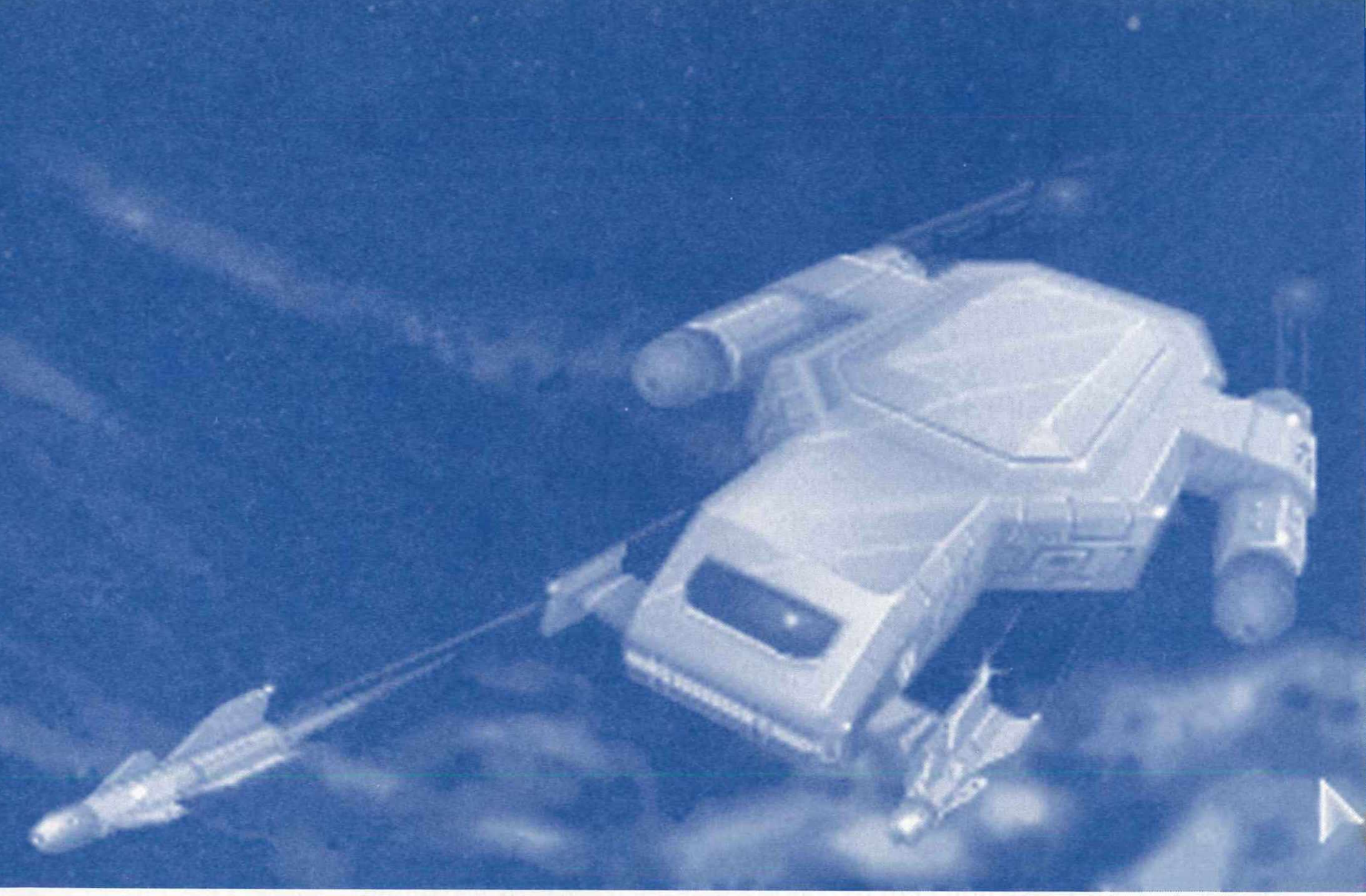
The Income graph shows the amount of funding being given to X-COM by the various nations. Here you can see funding levels for two countries, Russia and France. Russia, at the bottom, has offered consistent funding (if low) throughout, while France peaked in the late summer. What happened was this: An alien base was established in France, and an infiltration mission forced the French government to sign a Vichy-like pact with the invaders. Thus, no more funding.


USA
RUSSIA
UK
FRANCE
GERMANY
ITALY
SPAIN
CHINA
JAPAN
INDIA
BRAZIL
AUSTRALIA
NIGERIA
SOUTH AFRICA
EGYPT
CANADA
TOTAL
$1000's
Income
1800
1600
1400
1200
1000
800
600
400
200
0
Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct
1998
1999

FINANCE

The final graph offers an excellent overview of the X-COM project's financial situation. Shown here are the levels for Income, Expenditures, and the overall score. Notice that income began at six million and rose over the year to ten, but that expenditures were consistently above income (made possible by sales of manufactured items), and that the score rose and fell but generally maintained an upward climb.


Income
Expenditure
Maintenance
Balance
SCORE
$1000's
Finance
36 000
32 000
28 000
24 000
20 000
16 000
12 000
8 000
4 000
0
Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct
1998
1999



APPENDIX B

ONLINE SOURCES OF X-COM MATERIAL

APPENDIX B

By now you're well aware of just how addicting this great game is, and, at the same time, how difficult it is to master completely. And you're equally aware that everyone else who's playing X-COM must be thinking the same things about the game that you are. Surely there must be some way of tapping into other people's experiences and skills to get through those highest difficulty levels.

There is. All you need is a modem and an account with an online service, and you can get all the hints, tips, and details you want. Which online services? All of them have something to offer, but let's concentrate on the two with the most X-COM information—CompuServe and the Internet. America Online has a few X-COM related files (use the Search Software facility), and Prodigy has a games BBS (jump "games") with some ongoing discussions, but CompuServe and the Net are by far your best bets. (Purists take note: I'm well aware that the Internet is *not* an online service. There—just so you know.)

COMPUSERVE

You'll find extensive X-COM information on CompuServe in the Gamers+ Forum. Type **go gamers** at the prompt, or maneuver your way through the menus. Once there, you have two choices: Messages or Library. No matter which you select, your next step is to enter the War Games area. This is where you'll find discussions of your favorite game.

Discussions in the Messages area range from novice to expert. Read for a while before posting your own message, because often someone else has had the same problem you're having and this person has already posted your question. A discussion on the day I last checked the Message area had several people discussing flying suits and the best way to find and use Elerium-115.

The Library area of the Gamers+ Forum is much more helpful. Here you'll find FAQs (files of "frequently asked questions"), along with strategy tips and "cheats." Cheats are small programs written by X-COM players that you can run to enhance your X-COM game one way or another.

One such cheat is Rodney Hillis's ALTER, a program that lets you customize the maximum and minimum characteristic values of each soldier. Another is Pat Shea's XCOM/UFO Editor, which lets you change a limited number of items, but keeps the purity of the game intact. An extremely popular cheat is the XCOM Money Cheat Utility, a small program that lets you increase your available funds to two billion dollars. Other programs let you print soldier characteristics, alter base configurations, and so forth. Simply sort through the list and determine what you want to do.

A WARNING ABOUT CHEATS!

Like all instances of cheating, you often cheat yourself as much as the program. X-COM can be won without cheats, so use them only if you're thoroughly frustrated. This isn't an ethical point (like, who cares if you beat a computer anyway?), but simply a warning. Using cheat programs can make you feel like you've wasted your money on the game itself.

Throughout the Gamers+ Forum library area, you'll find files dealing with X-COM strategy tips, tactical tips, and frequently asked questions. If you want to know how to play the game well, download and read these files. You'll find discussions, arguments, charts, tables, and all sorts of useful information. You'll also find that your own games are unlike even the best of the veterans', and that you don't necessarily need their help—always worth finding out.

You can also try the MicroProse area in the Game Publishers B forum, but you won't find much of interest there. Type **go microprose** at the prompt.

THE INTERNET

To retrieve any of the following information, you need an Internet account. If you're a college or university student, getting one is relatively easy (check with your systems people). If you're hooked up to the Net at work, getting one is also simple (again, check with your systems folks). If neither of these applies, however, look through your local newspaper, local campus newspapers and bulletin boards, and so on, to find an Internet service provider in your area. An account usually runs between $20 and $40 per month. If that seems expensive, remember that far more than just games information is available on the Internet.

Probably the best site for X-COM material can be found on the World Wide Web (use Mosaic or Netscape) at the following address:

```
http://wcl-rs.bham.ac.uk/GamesDomain/ufo/ufo.html
```

This U.K. site, maintained by Tim Chown, features details about the British version of the game (it's called "UFO: Enemy Unknown" over there), but just about everything is applicable anyway. Here you'll find general tips, full game information, and extensive questions and answers.

If you'd rather discuss X-COM with other players, why not join a news group? The most useful is:

```
comp.sys.ibm.pc.games.strategic
```

This news group has discussion threads about all sorts of interesting games, X-COM included. The postings in this group are from a variety of people from all over the world, and they change regularly. Postings specific to X-COM include discussions of strategy and tactics and the occasional posting of "cheat" programs.

INDEX

Note to the Reader:

Boldfaced numbers indicate pages where you will find the principal discussion of a topic or the definition of a term. *Italic* numbers indicate pages where topics are illustrated in figures.

Numbers

- 360-degree coverage strategy, 139–140

A

- abductions, 161
- Abductor alien aircraft, 164
- aircraft, **42–46**, **76–90**, **163–166**
  - airgame checklist, **90**
  - alien aircraft, **163–166**
  - Avenger interceptor/transport, 83–84, *83*, 120, 171–172, *172*
  - choosing where to fight, **89–90**
  - equipping, **42–46**, **85–88**
  - Firestorm interceptors, 80–81, *80*
  - how many to buy or build, **84**
  - Interceptor aircraft, 77–78, *77*
  - interceptors versus transports, **76**
  - Lightning interceptor/transport, 81–82, *82*
  - researching, **115**, *117*
  - Skyranger troop transports, 78–80, *79*
- Air-to-Air Combat window, **18–23**, **89–90**
  - choosing where to fight, **89–90**
  - Damage Display, 20
  - Message Box, 20
  - Minimize Window icon, 19–20
  - Order buttons, 21–23
  - overview of, 18–19, *18*
  - Radar Screen, 19
  - Range Box, 20
  - View UFO button, 21, *21*
- alien aircraft, **163–166**. *See also* aircraft
- alien containment facilities, **99–100**
- aliens, **150–163**
  - alien groups that hang together, **152**
  - alien ranks, **152**
  - attacking alien sites, **159–161**
  - capturing alien commanders, **173–176**
  - halting alien missions, **161–163**
  - interrogating, **152–153**, **176**
  - overview of, **150–152**
  - researching, **113–115**, *113*, *114*, *117*
  - types of, **151–152**, **153–159**
- alloys, 112, *116*, 119
- America Online forums, 194
- Avenger interceptor/transport, 83–84, *83*, 120, 171–172, *172*

B

- Base Display, **26–48**. *See also* bases
  - Base Information window, **47**, **106–108**
  - Build Facilities button, 41
  - Build New Base button, 39–40
  - Equip Craft window, **42–46**
  - Installation menu, 41–42, *41*
  - overview of, 26–29, *27*
  - Purchase/Hire Personnel window, 29–31, *30*
  - Sell Items/Sack Personnel window, 31, 107
  - Soldier Information window, 48, *48*
  - Transfer button, 46–47
- base facilities, **41–42**, **95–102**
  - alien containment facilities, 99–100
  - base defense comparison table, 102
  - building, **41–42**, *41*, 95–97, *97*
  - fusion ball defenses, 101
  - general stores, 99
  - grav shields, 101–102
  - hangars, 100
  - hyper-wave decoders, 102
  - laboratories, 98
  - laser defenses, 101
  - living quarters, 97
  - missile defenses, 100–101
  - plasma defenses, 101
  - small and large radar systems, 99
  - workshops, 98
- bases, **26–48**, **92–108**. *See also* manufacturing; research
  - alien base construction sites, **161–162**
  - alien bases, **159–160**
  - building, **39–40**, *40*
  - how many to build, **92–93**
  - launching ships from, 16
  - management checklist, **108**
  - overview of, 27–29, *27*, *28*
  - personnel, **102–105**
  - transferring material between, 46–47
  - where to locate, **93–95**, *94*
- Bases button, Global Display, 23, 26
- Battlescape, **55–59**, *55*. *See also* tactical combat; Tactical Display
  - control bar, 56, *56*
  - levels of, 57–58, *57*
  - overhead map view, 58–59, *58*
  - overview of, 55–56, *55*
  - what you see, 56–57
  - white crosses (+), 59
- Battleship alien aircraft, 164

C

- Celatids, **153–154**
- cheat programs, **195**, 196
- Chryssalids, **154**
- CompuServe forums, **194–195**
- Costs chart, 107–108, *107*
- Craft Status window, 17–18
- crash sites, 160
- crosses (+), 7, 59
- Cyberdiscs, **154–155**
- Cydonia or Bust research project, **172**, *173*
- Cydonian mission, **178–185**. *See also* strategies
  - Cydonian base, 181–182, *182*
  - endgame, 182–185, *184*

  final battle, 180–181, *180*, *181*
  launching, 178–180, *179*

D

Damage Display, Air-to-Air Combat window, 20

E

engineers, **36–39**, **105**. *See also* manufacturing
equipping. *See also* weapons
  interceptors, 42–43, *43*, 85–86
  soldiers, 51–53, *52*, 87–88, *89*, 127–130, *129*, *130*
  troop transports, 44–46, *44*, *45*, *46*, 86
Ethereals, **155**
explosives, 143–146

F

facilities. *See* base facilities
Firestorm interceptors, 80–81, *80*
Floaters, **156**
forums, **194–196**
Funding button, Global Display, 13
fusion ball defenses, 101

G

games. *See* X-COM
general stores, 99
Global Display (Geoscape), **4–23**
  Bases button, 23, 26
  crosses (+), X's, and squares, 7
  Funding button, 13
  graphs, 12–13, *12*, **190–192**
  Intercept button, **13–23**. *See also* Air-to-Air Combat window
    Craft Status window, 17–18
    if enemy is intercepted, 18–23
    if interception is unsuccessful, 17–18
    intercepting ground targets, 23
    intercepting UFOs, **15–16**, *15*, 85, 90
    overview of, 13–14
    Redirect Craft window, 17
  Options button, **8–10**
  overview of, 4–5, *5*
  Time Controls, 7–8
  UFOpaedia, 10–12, *11*
  viewing different parts of Globe, 6, *6*
graphs, 12–13, *12*, **190–192**
grav shields, 101–102
grenades, 144, 145

H

hangars, 100
harvest missions, 162
Harvester alien aircraft, 164
heavy weapons platforms (HWPs), 146–147
hyper-wave decoders, 102

I

infiltrations, 162
Installation menu, Base Display, 41–42, *41*
Intercept button, Global Display, **13–23**. *See also* Air-to-Air Combat window
  Craft Status window, 17–18
  if enemy is intercepted, 18–23
  if interception is unsuccessful, 17–18
  intercepting ground targets, 23
  intercepting UFOs, **15–16**, *15*, 85, 90
  overview of, 13–14
  Redirect Craft window, 17
Interceptor aircraft, 77–78, *77*
interceptors. *See also* aircraft
  equipping, 42–43, *43*, 85–86
  versus transports, **76**
Internet X-COM sites, **196**

L

laboratories, 98
landing sites, 160
laser defenses, 101
laser weapons, 112, *116*, 118–119
Launch Interception window, Global Display, 15–16, *15*
Lightning interceptor/transport, 81–82, *82*
living quarters, 97

M

manufacturing, **36–39**, **117–121**. *See also* research
  alien alloy manufacturing, 119
  Avenger aircraft manufacturing, 120, 171–172, *172*
  changing production projects, 39
  checklist, **121**
  laser and plasma weapons manufacturing, 118–119
  locating manufacturing bases, **120–121**
  overview of, 36–37, *37*, 98, 105
  producing new items, 38
  profits table, **120**
  selling products, 31, 39, 119
  storing products, 39, 99, 107
  strategies, **117–118**
Message Box, Air-to-Air Combat window, 20
MicroProse forum, 195
Minimize Window icon, Air-to-Air Combat window, 19–20
missile defenses, 100–101
Mutons, **156–157**

O

online X-COM forums, **194–196**
Order buttons, Air-to-Air Combat window, 21–23

P

personnel, **102–105**. *See also* engineers; scientists; soldiers
pistols, 141, 142–143, *143*
plasma defenses, 101
plasma research, 112, *116*
plasma weapons, 118–119
Prodigy clubs, 194
proximity grenades, 145
Purchase/Hire Personnel window, Base Display, 29–31, *30*

R

Radar Screen, Air-to-Air Combat window, 19
radar systems, 99
Range Box, Air-to-Air Combat window, 20

ranks, of aliens, **152**
Reapers, **157**
Redirect Craft window, 17
research, **31–35**, **110–117**. *See also* manufacturing
    aircraft research, 115, *117*
    alien alloys and plasma research, 112, *116*
    alien research, 113–115, *113*, *114*, *117*
    alien research missions, **162**
    checklist, **121**
    completing, 34–35, *35*
    Cydonia or Bust project, **172**, *173*
    laser weapons research, 112, *116*
    locating research bases, **120–121**
    overview of, 31–32, 105
    research charts, 115, *116–117*
    starting, 32–34, *32*
    strategies, **110–111**, 115, **172**
retaliations, 163
rifles, 141, 142–143, *143*

S

scientists, **31–35**, **105**. *See also* research
Scout alien aircraft, 165
search and destroy tactics. *See* tactical combat
Sectoids, **157–158**
Sectopods, **158**
Sell Items/Sack Personnel window, Base Display, 31, 107
selling manufactured products, 31, 39, 119
Silacoids, **158–159**
Skyranger troop transports, 78–80, *79*
smoke grenades, 145
Snakemen, **159**
soldiers. *See also* tactical combat
    equipping, **51–53**, *52*, **87–88**, *89*, **127–130**, *129*, *130*
    moving in battle, 64–65
    selecting for battle, 60–61, *61*
    sending into battle, **59–65**
    teamwork and, 138
    viewing information about, 48, *48*, 61–63, *63*
squares, in Global Display, 7
storing manufactured products, 39, 99, 107
strategies, **171–176**. *See also* Cydonian mission
    for attacking alien sites, 159–161
    Avenger research and manufacturing, **171–172**, *172*
    capturing and interrogating alien commanders, **173–176**
    for halting alien missions, 161–163
    manufacturing strategies, 117–118
    overview of, **170–171**
    research strategies, 110–111, 115, **172**
    for tactical combat, 139–140, *141*, 142, 147
supply missions, alien, 163
Supply ships, alien, 166

T

tactical combat, **50–71**, **126–135**, **138–148**. *See also* soldiers; weapons
    aborting missions, 70
    checklists, **135**, **148**
    entering the battlefield, **131–134**, *131*, *132*, *133*
    firing weapons, **65–70**
    overview of, 127
    playing in turns, 53–54, 70
    saving games, 9, 70–71
    sending soldiers into battle, **59–65**
    soldier equipment planning, **127–130**
    strategies
        360-degree coverage strategy, 139–140
        approaching UFOs, 140, *141*
        offensive and defensive arms strategy, 142, 147
    time units (TUs), 54, 62, 133–134
Tactical Display, **50–71**. *See also* Battlescape
    entering and leaving, 50–51
    Equip Squad window, 51–53, *52*
tanks, 146–147
terror missions, alien, 163
Terror ships, alien, 166
terror sites, alien, 161
Time Controls, Global Display, 7–8
time units (TUs), in tactical combat, 54, 62, 133–134
transferring material between bases, 46–47, 107
troop transports. *See also* aircraft
    equipping, 44–46, *44*, *45*, *46*, 86
    versus interceptors, **76**

U

UFOpaedia, 10–12, *11*
UFOs
    approaching, 140, *141*
    intercepting, **15–16**, *15*, 85, 90

V

View UFO button, Air-to-Air Combat window, 21, *21*

W

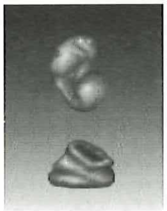
weapons, **141–147**. *See also* equipping; tactical combat
    explosives, 143–146
    firing, **65–70**
    grenades, 144, 145
    overview of, 141–142
    pistols and rifles, 141, 142–143, *143*
    tanks, 146–147
winning X-COM. *See* strategies
workshops, 98. *See also* manufacturing
World Wide Web X-COM site, 196

X

X-COM. *See also* strategies
    abandoning games, 10
    cheat programs, **195**, 196
    loading games, 9–10
    online resources, **194–196**
    saving games, 9, 70–71
    starting first game, 4
X's, in Global Display, 7

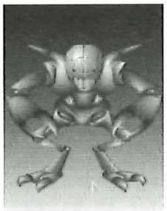
A Catalogue of Alien Races

Celatid



Can fly and find X-COM soldiers easily and quickly. Shoots venomous spitballs. Found with Mutons and Silacoids.

Chryssalid



Very deadly. Injects eggs and venom in human soldiers, turning them into zombies, then into Chryssalids. Found with Snakemen.

Cyberdisc

Hovers or moves quickly across the battlefield, spotting soldiers. Has heavy armor and can only be shot down with plasma weapons. Can be mind-controlled if you know Psionics. Found with Sectoids.

Ethereal

Has a highly developed ability at mind control. Wears a heavy armor cloak that absorbs hits. Uses Psionics freely and devastatingly. Found with Sectopods.

Floater

Is speedy but easy to capture and kill. In charge of alien bases early in the game, making it easy to capture a leader or commander. Found with Reapers.

Muton

Carries plasma weapons and fires them accurately. Is a slave of Ethereals, and when separated from them often dies. Found with Celatids and Silacoids.

Reaper

Has powerful jaws that can bite through a tank. Engages in hand-to-hand combat only. Found with Floaters, who appear to control them.

Sectoid

Fires weapons very accurately and is hard to hit. Commanders and leaders have Psionic abilities and are adept at mind control. Can turn your soldiers against you. Found with Cyberdiscs.

Sectopod

Is very difficult to kill. Carries high-level plasma weapons. Can be stopped only with blaster bombs or large troop deployments. Found with Ethereals.

Silacoid

Can eat through whatever stands between it and its destination. Keep your tanks and hovercraft out of its way. Found with Mutons.

Snakeman

Is easy to destroy early on. Unfortunately, is often found with Chrysalids, making them worthy opponents. Take advantage of opportunity fire with Snakemen.

X-COM

STRATEGIES AND SECRETS

ANSWERS YOUR QUESTIONS AND REVEALS THE CUNNING INSIGHTS OF X-COM GAMERS WORLDWIDE

LEARN HOW TO:

- **SALVAGE ALIEN ARTIFACTS FOR YOUR OWN OPERATIONS**
- **MANAGE RESOURCES EFFECTIVELY**
- **DISCOVER ENEMY STRENGTHS AND WEAKNESSES**
- **CLEAN OUT ALIEN CRASH SITES, TERROR SITES, AND BASES**

BEHOLD THE ENDGAME—AT LAST

THE FATE OF HUMANKIND IS IN YOUR HANDS.

This is no mere games book; ***X-COM Strategies and Secrets*** is a masterpiece of research, dedicated to the destruction of the alien menace. Built on the questions, concerns, and insights of X-COM players across the world, this comprehensive strategy guide is the key to our future survival. The enemy must never know it exists!

Your mission: to save the world from alien invasion. Success depends on defining solid strategies, managing your finances and troops intelligently, and crushing the alien hordes. This book helps you succeed at all three, and teaches you how to:

- **MANAGE THE GEOSCAPE**
- **PREPARE YOUR BASES FOR COMBAT**
- **MASTER BATTLESCAPE COMBAT**
- **FIGHT THE AIR GAME**
- **BUILD RESOURCES THROUGH RESEARCH AND MANUFACTURING**
- **HANDLE SEARCH AND DESTROY MISSIONS**
- **RESEARCH ENEMY STRENGTHS AND WEAKNESSES**

Your ultimate goal: the Endgame. Yes, you can win this game. If you're constantly thwarted by aliens building bases, if resource management is your Achilles' heel, if you're not sure which alien artifacts to research, then find out what it takes to master X-COM and undertake the final mission.

ABOUT THE AUTHOR

Neil Randall is an English professor who has been writing computer game reviews and features since 1984. He has published several choose-your-own-path novels, and was the role-playing columnist for *PC Gamer* magazine. Currently, he writes for *CD-ROM Today*, *PC/Computing*, *Windows*, *The Net*, and other computer magazines. Mr. Randall also has founded a design service for businesses on the Internet.

SYBEX

90000

9 780782 116717

ISBN 0-7821-1671-X U.S. $12.99